DEFICIENT RESOURCES

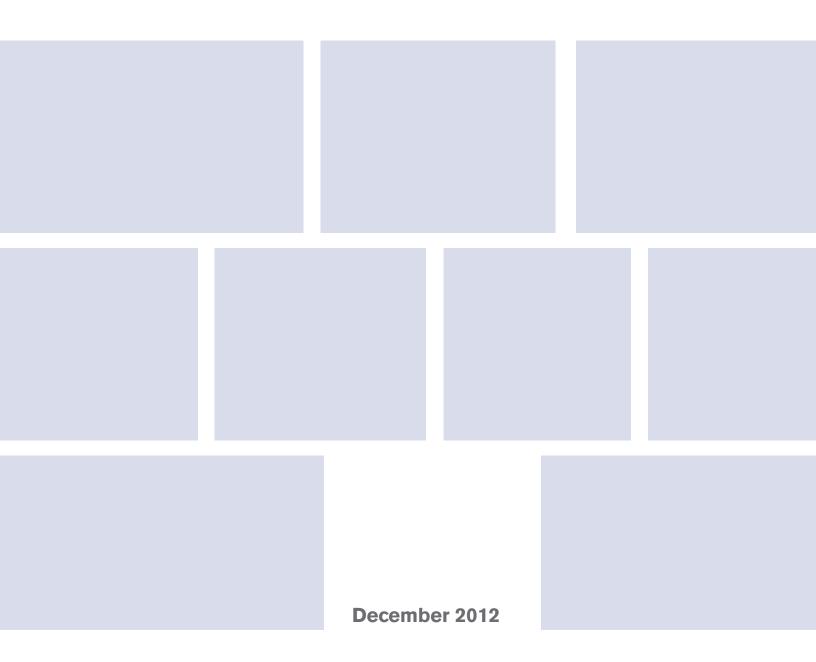
An Analysis of the Availability of Basic Educational Resources in High Needs Schools in Eight New York State School Districts





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The Campaign for Educational Equity is a nonprofit research and policy center at Teachers College that champions the right of all children to meaningful educational opportunity and works to define and secure the full range of resources, supports, and services necessary to provide this opportunity to disadvantaged children.

We believe that all children, whatever their family background, wherever they live, and whatever the current political and economic climate, are entitled to a meaningful opportunity to graduate from high school prepared for college success and/or competitive employment. We promote a comprehensive approach to educational opportunity that would provide disadvantaged students the full spectrum of resources, services, and supports most critical for school success because we believe their right to meaningful educational opportunity entails access to these essential resources.

Founded in 2005 by educational law scholar and advocate Michael A. Rebell, who successfully litigated the landmark school funding lawsuit, CFE v. State of New York, the Campaign pursues systems change through a dynamic, interrelated program of research, legal analysis, policy development, coalition building, curriculum development, and advocacy dedicated to developing the evidence, policy models, curricula, leadership, and collaborations necessary to advance this agenda at the federal, state, and local levels.

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Introduction

In today's hard economic times, New York State, like most states around the country, has substantially reduced funding for public education. While the realities of fiscal constraint may require the state to ferret out waste and promote cost-effectiveness, what it cannot do is reduce essential educational services to public school students. The New York Court of Appeals, the state's highest court, made clear in *CFE v. State of New York*, that Article I, § 1 of the New York State Constitution entitles all students to a "meaningful high school education," one that prepares them to be capable citizens and competitive workers. These constitutional rights are not conditional, and they cannot be put on hold because there is a recession or a state budget deficit.²

In 2011, the Campaign for Educational Equity established the Safeguarding Sound Basic Education Project. One of the major components of this project has been to gather and analyze data about the availability of resources and services in high-needs schools both in New York City and around the state. A number of groups have issued statistical reports on the numbers of teachers laid off, increases in class size, and overall reduction in certain services that have resulted from the state's cutbacks in educational funding since 2009. (A summary of these surveys is set forth in Appendix A.) We believe that it is also necessary to complement this information with a detailed analysis of the impact of budget reductions on students' educational opportunities at the school level and to investigate the extent to which the reduction in resources and services compromises students' constitutional rights.

To do this, we conducted an in-depth study of the current availability of basic educational resources in 12 high-needs schools in New York City and in 21 additional schools in 7 other high-needs school districts around the state (Rochester, 2 small city, 2 suburban, and 2 rural districts). (A description of the methodology we used for the study is set forth in Appendix B.) The rubrics we used for our extensive interviews and analyses were based on the legal requirements set forth in Essential Resources: The Constitutional Requirements for Providing All Students in New York State the Opportunity for a Sound Basic Education, a report of the Campaign for Educational Equity that is being released as a companion document to this report. Our analysis focuses on 8 specific areas of constitutional entitlement: qualified teachers, principals, and other personnel; suitable curricula; an expanded platform of services for "at-risk" students; adequate resources for students with extraordinary needs; class sizes; instrumentalities of learning; a safe and orderly environment; and facilities.

Many of the findings in this report are shocking and disturbing. Of the 33 high-needs schools in our study, 13 reported that they were not providing students with sufficient instruction to meet the state's minimum curricular requirements in science; 3 high schools, all in New York City, were not providing any instruction in chemistry or physics. Fourteen schools throughout the state were not able to provide their students minimal course offerings in art and 11 of the 12 high schools in our sample were not able to provide their students with college readiness counseling and supports. *Not one* of the 33 schools we analyzed was providing the required amount of extra academic support services mandated for students who are failing to meet the state's proficiency standards for their grades. Whether for large urban or small rural schools, the findings are strikingly similar: they lack sufficient resources in every category of the most basic resources that the court and the state require and that students must have in order to succeed in school.

For example, one of the rural elementary schools in our sample lacked the necessary staffing to provide

¹¹⁰⁰ N.Y. 893 (2003)

² For a discussion of the applicable constitutional law principles, see, Michael A. Rebell, *Safeguarding the Right to a Sound Basic Education in Times of Fis- cal Constraint*, 75 Alb. L.Rev.1855, 1869-1885 (2012)

students with the minimum required instructional time in 3 out of the 4 core subject areas of English language arts, math, science, and social studies. Struggling students entitled to additional instructional support also went without services in those areas. The school had no social worker or school psychologist. It got occasional visits from the staff of a local agency, but students often waited for weeks or months. Small issues that affected learning became large because, as one educator said, they are being "Band-Aided instead of resolved."

In one NYC middle school, average 8th-grade class sizes were 32 across the board and, in addition, students were not receiving minimal instructional time in science, social studies, art, and physical education. Students got no instruction in a language other than English, though a full-year course is required before 9th grade. The school lacked adequate laboratory facilities, only 10 of its 30 computers were functional, and students were unable to take textbooks home to do homework or study for tests. Sharing a building with another school, its students had no access to the library media center in that facility, which was dominated by the other school. It lacked private office space for any staff, and the guidance counselor, who had no office, regularly conducted confidential meetings with students and their parents on the landing of the stairwell.

An overcrowded suburban high school in our study had class sizes of up to 35 students in core subjects, and all of its core subject classes for English language learners were well above 30 students. As a result of overcrowding and funding constraints, the school also was able to provide only a limited number of advanced placement courses and had to cut its mock trial program and civics offerings. Once able to offer academic intervention services in each core subject area, budget cuts had eliminated those opportunities for most students who consistently fell short of state standards.

In a large high school in one of the small city districts, class sizes across the board exceeded 30 and student supports have withered away as guidance counselors have seen their caseloads increase by more than 50% over the past 3 years. The school has a sizeable population of English language learners, but lacks sufficient ESL and bi-/multi-lingual personnel to provide mandated instruction and social-emotional supports to them. Because its student enrollment far exceeds school building capacity, the school has had to put classes for English-language learners and students with disabilities into former storage rooms, some of which do not have proper heating and ventilation. Lacking a sufficient number of deans to deal with disciplinary issues, the school's assistant principals are now required to spend 50-75% of their time on student discipline, and were unable to properly conduct the classroom observations and teacher support activities required under the state's Annual Professional Performance Review law.

The repeated findings of inadequacy in virtually all of the categories under review in high-needs schools across every type of district may seem repetitive, but they are, in fact, cumulative evidence of the extent to which the state is currently denying its most vulnerable students the essential resources they need for school success. We know the consequences. As a result of these deficiencies, many of the students in these schools are not getting what they need to meet learning standards, pass tests, and advance at grade level. Activities to engage them with learning are not available. Barriers to their academic success are not addressed. Many of them drop out, and many who graduate are not college or career ready.

The seriousness of these resource deprivations has not previously been documented and brought to public attention, partially because the state education department does not systematically enforce or report on violations of its own extensive regulations – ironically, because the state education department itself lacks sufficient resources to do so.

Because all of our sample schools serve high numbers of students from low-income households, students with disabilities, and English language learners, educators repeatedly emphasized that the applicable state statutory and regulatory requirements are truly "minimal"; even if they had sufficient resources to meet these minimal requirements, they would not have adequate or sufficient resources to provide all of their students a meaningful opportunity to meet state standards. The information presented in this report was gathered during the 2011-12 school year. Given the continuing constraints on education funding, the conditions are probably even more dismal during the current school year, and, unless remedial action is taken promptly by the state, are likely to deteriorate even further during the next school year.

Our conclusions regarding the extensive constitutional violations that are being perpetrated on students attending the schools we have studied are based on the specific constitutional, statutory, and regulatory requirements that we document in the accompanying *Essential Resources* report. Many of the violations we report are founded on clear violations of specific minimum requirements like mandatory courses that are not being offered and required services that are not being provided at all. Where the courts and the regulations have expressed the requisite requirements through general gauges like "sufficient" or "adequate," we have relied on the pooled professional judgment of the 60 administrators and dozens of teachers and support personnel we interviewed in depth at these schools to determine the level of services that would be sufficient to provide their students a meaningful opportunity to meet the New York State Learning Standards.

These professional judgments were anchored in standards grounded in law and based on fulfilling very basic instructional needs. So while there is no hard legal standard for what exactly constitutes "sufficient" instructional materials for a sound basic education, a school that said it lacked adequate materials in math, for example, made this determination based on having one set of 25 calculators for the 150 students in all of its math classes; this meant that 2 classes might need to use them at one time, students could not take these tools home to do homework, and teachers could not assign homework that required these tools. These professional judgments reflect minimal expectations. Dealing on a daily basis with the tough reality of trying to provide some modicum of basic services to students with high learning needs, even the most far-reaching aspirations of these educators would probably fall short of the routine expectations of their colleagues in affluent school districts who work with more privileged children.

Some may respond to these findings by saying that providing sufficient numbers of well-trained teachers, adequate libraries and laboratories, reasonable class sizes, and an extra platform of services for "at-risk" students are luxury levels of services that the state cannot afford, especially during these difficult economic times. But the fact is that access to these services cannot be considered "aspirational," even in hard times. The explicit policy of this state is that all children can meet the New York State Learning Standards if provided sufficient opportunities, and New York State has made a firm commitment to the federal government that it will make maximum efforts to ensure that all students in the state achieve proficiency in accordance with the state's standards by 2020. Moreover, consistent with the national interest in ensuring that our students are prepared to compete effectively in the global economy, the state has now adopted the more rigorous Common Core State Standards and the Regents have declared that all of the state's high school graduates must be "career and college ready." These actions make it even more critical that all students are provided all of the essential resources that they need to meet these higher expectations.

In its *CFE* decision, the Court of Appeals rejected the contention that low student performance is caused by socioeconomic conditions that are beyond the schools' capacity to remedy. It specifically held that "we cannot accept the premise that children come to the New York City schools ineducable, unfit to learn." Leland

DeGrasse, the judge who heard all of the evidence about resource shortages and their impact on "at-risk" students during the lengthy *CFE* trial, made the point even more directly:

The evidence introduced at trial demonstrates that these negative life experiences can be overcome by public schools with sufficient resources well deployed. ... The Court finds that the City's at-risk children are capable of seizing the opportunity for a sound basic education if they are given sufficient resources.⁴

The argument is also made that New York spends more *per capita* on education than most other states and that ample funds have been made available but they are being mismanaged at the local level. The Court of Appeals also considered this contention. It held that it is "the State" that is ultimately responsible for ensuring that the funds it provides do in fact "secure [...] for its citizens their constitutionally-mandated rights." In other words, it is the state's responsibility to ensure that services are being provided efficiently at the local level, and if they are not, the students must still receive all of the services to which they are constitutionally entitled.

High-needs schools are defined for the purposes of this study as schools with large numbers of students from low-income families (eligible for free or reduced price lunch), students below proficiency in basic skills (as measured by math and English language arts assessments), English language learners, and/or students with disabilities. We have focused our attention on these students because they have the greatest needs, are the most vulnerable to resource reductions, and, in the view of the New York Court of Appeals, were being denied essential resources on a broad scale even before the current round of budget cuts were implemented.

Our sample includes elementary, middle, and high schools, and it encompasses schools from all five boroughs in New York City and all geographic areas of the state. Our research team met multiple times with school personnel to conduct interviews based on resource inventories covering personnel, curricula, class size/instructional groupings, instructional materials, safe and supportive climate, special needs, family engagement, and facilities (see Appendix B). Our sample of 33 schools is small in relation to the total number of schools in the state, but we believe that it is representative of the large subset of schools that serve the state's most needy students. While our findings are not generalizable to every school in this group, and will be relevant to varying degrees in other less needy schools around the state, they nevertheless point to some alarming consequences of the impact of funding constraints on the availability of basic educational resources. These findings warrant immediate consideration and a prompt response, as well as additional, broader study of resource deprivations in other schools.

⁴CFE v. State of New York, 187 Misc. 2d 1,23 (S. Ct. N.Y. Co, 2001), aff'd 100 N.Y. 2d 893 (NY 2003).

⁵ CFE v. State of New York, 100 N.Y. 2d at 922.

Summary of Major Findings

The state has put into effect extensive reductions in education funding in recent years — on top of a funding base that the Court of Appeals had already deemed constitutionally inadequate. Our study investigated the hypothesis that, as a result, some schools, particularly schools in low-wealth communities that serve large numbers of high-needs students, lack the necessary resources to provide their students with required basic educational essentials. We studied the availability of basic educational resources in 8 areas, such as personnel, curricula, instructional materials, and facilities, in 33 high-needs schools around the state and found a number of serious deficiencies.

Specific Violations of State Requirements

Personnel

- 31 of the 33 high-needs schools in our sample reported that they lacked a sufficient number of certified teachers. The lack of a sufficient number of teachers results in schools being unable to provide sufficient course offerings or instructional time in required curricular areas, class sizes that are above appropriate levels, a lack of adequate academic support services, and a lack of sufficient electives and advanced classes, among other things.
- In the vast majority of schools (28 of 33), in one or more core subject areas of English language arts, mathematics, science, and social studies, schools reported that students were being taught by teachers who were not adequately trained to provide effective instruction for high-needs students. The percentage of classroom and core subject area teachers whose training and effectiveness were deemed inadequate ranged from a low of 7% to a high of 80%, with an average among all 33 schools of 20%. On average, the schools reported that over half of these teachers could become effective with sufficient professional development and supports, but they lacked the resources to provide these. Eighteen schools reported that, on average, 35% of their special education teachers were not adequately trained to meet the needs of students in their classes.
- Only 2 schools had sufficient number of certified and adequately trained teachers to allow students to
 meet state-specified learning goals in the arts, career development and occupational studies, family and
 consumer science, health education, library and information skills, physical education, a language other
 than English, and technology. Twenty-three of the 33 schools were inadequate in 2 or more areas. Five
 schools (including 3 in NYC) were inadequate in all of the specialized subject areas required for their
 students. The small schools in our sample were much more likely to lack a sufficient number of teachers
 to meet minimum requirements.
- 30 of the 33 schools said that they lacked sufficient assistant principals, department heads, or other administrators to carry out mandated annual professional performance reviews and provide professional support to teachers. Half of the schools were not able to properly implement the state's anti-bullying and safety plan requirements. Five schools were unable to provide any mentoring for new teachers.

Curriculum

Of the 33 high-needs schools in our study, 15 schools (5 of them in New York City) reported that they lacked sufficient teachers to meet minimum state requirements in the core subject areas of English language arts,

mathematics, science and social studies.⁶ For students, these staffing deficiencies mean extensive gaps in the availability of basic curriculum offerings in most of these schools:

- 13 of the 33 schools are not providing sufficient instructional time in science to meet the state's minimum requirements.
- 5 schools are not providing sufficient instructional time or course offerings to meet state requirements in social studies.
- 3 schools are not meeting minimum state requirements in mathematics.

In regard to other required subjects,

- 10 schools lacked sufficient art teachers to provide minimum required instruction.
- 10 middle and high schools lacked resources to offer mandated career development and occupational courses.
- 7 middle schools and 5 high schools had no certified health teachers.
- All 12 of the New York City schools in the sample lacked adequate access to library-media specialists.
- 2 middle schools had no foreign language teachers, though students are required to have a year
 of study before 9th grade.
- 16 of 33 schools could not meet the state's minimum requirements for physical education.

Student Support Services

State requirements for a wide range of support services were also being widely violated:

- 28 of the 33 schools did not have sufficient psychologists and social workers to meet requirements to respond to the needs of students with behavioral or adjustment problems.
- 4 of 11 elementary schools and 7 of 12 high schools said that their school psychologist had time
 only to provide IEP-related services for students with disabilities and had no time to address the
 needs of other at-risk students entitled to counseling.
- 27 of the 33 schools were unable to meet requirements for trained attendance teachers and other personnel to promote regular attendance.
- 6 of 12 middle schools did not have sufficient guidance counselors to provide required support for high school articulation.
- 11 of the 12 high schools were unable to provide their students with college readiness counseling and supports.

⁶ These figures do not take into account "sufficiency" in terms of class sizes. Thirty of the 33 schools do not have sufficient numbers of teachers to maintain proper class sizes.

Expanded Services for "At-Risk" Students

Consistent with constitutional requirements, New York State has specific laws and regulations that require the provision of "sufficient and appropriate academic intervention services" (AIS) to all students that fail to achieve grade-level performance in English language arts, mathematics, science, or social studies. All schools are now also required to provide Response to Intervention (RTI) services to students at risk of academic failure to lower rates of referral to special education and reduce students' need for academic intervention services.

- Not one of the 33 schools we studied was able to meet this requirement, either by providing extra academic support during the school day, or through after-school, Saturday, or summer programs. Schools tended to provide some services in some subjects to some students, but were far short of meeting the state's broad mandate that all "at-risk" students receive the full extent of the services they need and some schools were able to provide none of these supports.
- Not one of the 33 high-needs schools in our study reported that it was equipped with adequate resources to put in place the RTI procedures necessary to comply with the state's mandate. Twenty of the 33 schools had no RTI system or services at all, citing a lack of resources for administrative and teacher time, training, and expert personnel as barriers to implementation.

Required Supports for Students with Disabilities and English Language Learners

The majority of schools reported widespread deficiencies in their resources to provide required supports to meet the needs of students with disabilities and English language learners.

- In 6 schools, students with disabilities were improperly placed in inappropriate classes or not receiving required related services or assistive technology because of budget cuts. Nine schools said that their facilities were not adequate for students with disabilities, including 3 that had to provide physical therapy or adaptive physical education in hallways or other public areas.
- Almost half of the schools with English language learners (13 of 27) lacked sufficient English as Second Language (ESL) teachers to provide the required instruction in language arts or required content area instructional supports.

Class Sizes

Thirty of 33 schools reported class sizes in excess of the 20-23 range that the CFE court used a benchmark in this area. All of the New York City middle and high schools in our sample reported class sizes of 30 or over.

Instructional Materials

In 25 of the 33 schools there was a lack of sufficient up-to-date books for classroom use. In 21 of these schools, there were not enough textbooks to allow students to take them home to complete homework assignments or to study for a test.

Twenty-two schools reported that a lack of basic and current computer hardware impeded teaching and learning. All of these schools reported that the lack of sufficient resources to maintain and repair existing technol-

ogy and replace worn out or obsolete software, hardware, or necessary accessories (such as ink cartridges) rendered much of the instructional technology they had functionally unusable.

Facilities

Fifteen schools had lost custodial personnel, and 5 of them reported that routine cleaning was now done every other day instead of daily. As a result, 8 schools reported that they were infested with mice, and 7 were infested with cockroaches and or other insects; 2 schools reported that rooms had been quarantined because of mold, and 4 others reported that classrooms and bathrooms needed to be closed because of their inability to undertake necessary repairs. Twenty-four schools lacked proper electrical infrastructure to support instructional technology, and 25 schools reported that they were not meeting legal requirements in regard to libraries, auditoriums, gymnasiums, art rooms, and playgrounds. Sixteen of the 33 schools reported that they were not fully accessible to mobility-impaired students or staff.

Further Findings of Noncompliance with Constitutional Sound Basic Education Requirements

Beyond the specific violations of state statutes and regulations listed above, resource gaps substantially affected schools' ability to provide their students with the opportunity for a sound basic education. In many areas, state requirements are quite minimal. Because all of our sample schools serve high numbers of students from low-income families and communities, students with disabilities, and English language learners, principals and other educators repeatedly emphasized that even if they had sufficient resources to meet the minimal state requirements, they would not have adequate or sufficient resources to provide their students a *meaningful* opportunity to meet standards or to graduate from high school college and career ready.

For example, New York State requires high schools to provide 3 years of science instruction, but this need not include chemistry or physics – and 3 high schools in our sample could not offer the basic courses.

No opportunities for instruction or experience in the arts or music need to be provided beyond the one year required for middle school and the one year required for graduation. Though there were many schools that could not even meet this minimum requirement, most others that had resources to provide this required minimum did not consider it sufficient for a sound basic education. Elementary schools said they needed sufficient staff to provide students with experiences in the arts more than once a week; middle schools said they needed sufficient staff to provide arts electives like band and chorus; and high schools sought adequate staffing to provide students arts electives and arts sequences.

Many schools considered New York State's requirements for foreign language study too minimal (2 years of study by the end of grade 9 and one additional year in high school). In order for students to receive a Regents diploma with advanced designation, students must be able to take a 3-year language sequence in high school. In addition to the schools that couldn't provide even the minimum, 9 schools reported that, though they were able to meet minimum curricular requirements in this area, these requirements were not sufficient for a sound basic education. These schools sought sufficient staffing to provide students with meaningful career study choices and internships, a 4-year sequence of language study, AP language classes, and/or a choice of languages to make students truly "college and career ready."

For example, 7 schools that were meeting curriculum requirements in English language arts reported that they lacked the resources necessary to provide the additional instructional time in reading and writing and additional

exposure to literature that students would need to meet the state standards. Thirteen schools decried their inability to provide their social studies classes curriculum-related trips to museums, historical sites, and other real-world opportunities for exposure to experiences they considered essential for students to understand key concepts, especially since many of these students' families were unable to provide them such experiences.

Students are entitled to be taught by certified teachers, but there are no standards for determining whether these teachers are adequately trained or supervised. No school in the study had reported sufficient resources for time, staffing, or expertise they considered necessary to provide the professional development their teachers need to ensure effective basic instruction for their high-needs student population.

Schools must provide students who are below proficiency on state tests or "at-risk" of academic failure with extra services to allow them to reach proficiency. However, there are no quantity or quality parameters to this requirement and, in practice, any type or amount of service provided is sanctioned as sufficient.

The Court of Appeals in its *CFE* decisions repeatedly stressed that the state constitution requires the schools to prepare students to be capable citizens and competitive workers. State laws and regulations have largely neglected these constitutional requirements. To satisfy this constitutional mandate, schools need to be able to provide students the opportunity to participate in the kind of curricular and extracurricular activities that develop the character traits and interpersonal relationships they need to function productively as civic participants and in the marketplace; they need sufficient opportunities for community engagement in civic institutions to provide them the civic knowledge and practical skills. In many of the schools we studied, schools had few or no resources to devote to such instruction and activities.

Schools at all levels reported that they were not able to provide students adequate opportunities to acquire basic citizenship skills. Budget cuts had forced most of the high schools in our study to eliminate their civics-related afterschool offerings, including community service programs, student government, school newspaper, and programs like Model UN and Moot Court. All of the 12 high schools lacked adequate resources to provide students sufficient job-related courses, internship support, and career college counseling to prepare them to explore occupational options and postsecondary educational plans. Nine out of the 12 high schools (including all 5 NYC schools) could not offer students the types of advanced course offerings such as honors, and AP classes that competitive colleges want to see on students' transcripts.

Findings of Resource Deficiencies

I. Qualified Teachers, Principals, and Other Personnel

A. Classroom and Core Subject Area Teachers

To meet constitutional requirements, every school must have a sufficient number of certified teachers who are adequately trained to provide suitable instruction based on current state standards for all students, including students performing below grade level proficiency expectations. Of the 33 high-needs schools in our study, 31 reported that they lacked a sufficient number of certified teachers in the core areas of English language arts, mathematics, science, and social studies. The lack of a sufficient number of teachers results in schools being unable to provide sufficient course offerings or instructional time in required curricular areas, in class sizes that are above appropriate levels, in a lack of adequate academic support services, in a lack of sufficient electives and advanced classes, among other things. These will be discussed in later sections of the report.

In addition, 28 of the 31 schools reported that, in one or more core subject areas, classes were being taught by teachers who were not adequately trained or effective in providing basic instruction to high-needs students. The percentage of classroom and core subject area teachers whose training and effectiveness were deemed inadequate ranged from a low of 7% to a high of 80%, with an average among the all 33 schools of 20%. The percentage of teachers deemed inadequate was almost double in NYC (28.5%), compared with the rest of the state (15.7%).

On average, the schools reported that 57.5% of those teachers could become effective with sufficient supports – and again there was a gap between the estimates in NYC (43.5%) and the rest of the state (64.1%). Unfortunately, however, the schools also said they lacked adequate resources to provide the additional professional development and other supports that these teachers would need to become effective. A lack of adequate administrative staffing to undertake the time-consuming process of terminating a tenured teacher also affected the principals' ability to remove teachers whom they believed could not become effective.

In schools lacking adequate resources for basic staffing, the following additional related factors further detrimentally affected teaching quality:

- As a result of successive years of staff losses, schools had to reassign large numbers of their teachers
 to new grades and courses. Having a large number of teachers assigned to a grade level or course they
 had never taught before adversely affected teaching quality and effectiveness.
- NYC schools reported having to staff classes with substitutes for the first 2 months of the school year
 until budgets were finalized and they were permitted to hire another teacher. In middle and high schools,
 this negatively affected students' motivation and attendance in these classes.

⁷While no school reported any uncertified teachers, 3 schools reported that teachers were teaching core subjects out of license, and one of these and another 2 schools reported core classes were being staffed by "permanent" substitutes.

- Some schools outside NYC reported that their school districts employ rotation strategies to deal with staffing shortages. For example, a high school teacher might also teach a period of science at the middle school or several middle school teachers would teach math classes in the high school. This rotation strategy provides class coverage but denies students access to teachers except during class time and severely limits their ability to develop a relationship with the teacher. The teachers cannot participate in planning or professional development, and the principals cannot effectively supervise or hold them accountable.
- At schools with skeleton staffs, it was not possible to schedule common planning time for teachers, and there were no opportunities to discuss the needs of individual students or strategize with colleagues.
- A number of schools with large budget and staffing gaps reported that they received authorization to hire teachers only at the last minute or even after the school year had begun, when desirable candidates were no longer available.

B. Specialized Subject Area Teachers

The New York State Learning Standards require students to meet specified learning goals not only in core subjects, but also in the arts, career development and occupational studies, family and consumer science, health education, library and information skills, physical education, a language other than English, and technology. Every school must have sufficient number of certified and adequately trained teachers to permit students to meet these standards. Of the 33 high needs schools in our sample, only 2 had adequate personnel to meet requirements in all of these subject areas. Twenty-three of the 33 were inadequate in 2 or more areas. Five schools (including 3 in NYC) were inadequate in all of specialized subject areas required for their students. The small schools in our sample were much more likely to lack a sufficient number of teachers to meet minimum requirements.

1. Arts (Visual Art, Music, Drama, and Dance) Teachers

Seventeen of the 33 schools, including 9 of the 12 NYC schools, lacked a sufficient number of adequately trained arts teachers. Twelve schools lacked a sufficient number of teachers to provide their students with the minimum arts instruction required by the state, including 3 NYC schools that reported having no arts teachers at all. These included an elementary school and a middle school where students simply received no arts instruction whatsoever and a high school where students must take their required arts class online and have no other arts experiences available to them. Eleven schools reported that some classes were led by teachers who lacked adequate training or experience to provide effective, basic instruction; in 5 of these schools, 7 teachers were providing arts instruction who were not licensed for the subject.

Ten additional schools reported sufficient and qualified arts teachers to meet minimum requirements but said they lacked sufficient teachers to provide the amount of arts instruction they considered sufficient to meet the state learning standards. (Many of the schools that lacked personnel to meet minimum requirements also said these requirements were not sufficient.) Specifically, elementary schools said they needed sufficient staff to provide students with experiences in the arts more than once a week; middle schools said they needed sufficient staff to provide arts electives like band and chorus; and high schools sought adequate staffing to provide students arts electives and arts sequences.

2. Career Development and Occupational Studies Teachers

Twelve middle and high schools said they had no staffing to provide instruction in this area, and 4 schools said the limited staffing they had or that they could offer through BOCES was not sufficient. One high school

that used to have adequate resources to staff vocational classes both on site and through BOCES, as a result of budget cuts, was left with no staffing on site and could provide only about 40% of the BOCES slots that students needed.

Of the elementary schools, which largely rely on classroom teachers to provide instruction in this subject, 2 schools said they provided no instruction in this area and would require an additional specialized teacher or training for teachers in order to do so. Seven other elementary schools indicated that they provided some instruction in the classroom but other activities and experiences were necessary to ensure students could meet state learning standards in this area.

3. Languages Other than English Teachers

All New York State students are required to have one year of instruction in a language other than English before the 9th grade. In addition, one year of secondary level instruction in a language other than English is a high school graduation requirement for all students, but 3 years of a foreign language is required for an advanced Regents diploma. Of the 23 schools in our sample that serve grades 7-12,8 7 reported they lacked a sufficient number of certified and adequately trained teachers to meet these requirements; 6 of these schools are in NYC.

Two NYC middle schools reported having no language teachers and offering no language instruction at all. One school reported using an out-of-license teacher. Of the 5 NYC high schools in the sample, 3 had enough teachers to allow students to meet the minimum graduation requirement of one year of a language, but their students were precluded from qualifying for an advanced Regents diploma because their schools did not offer a three-year sequence. Students in these schools also are denied any choice of languages to study. An additional 9 schools reported sufficient qualified teachers to meet minimum requirements, but considered these requirements insufficient. They said that students should be entitled to a complete sequence of language study and a choice of languages.

4. Technology Education Teachers

The state has minimum technology education requirements for grades 7-12. Of the 23 schools in our sample that serve students in these grades, 3 are providing no technology instruction at all, and 4 are meeting minimum time requirements using teachers who are not certified or adequately trained; one school is using an out-of-license teacher and one school is using a permanent substitute. Six of these 7 schools are in New York City.

An additional 9 of the 23 schools reported an adequate number of teachers to meet state requirements but did not consider this minimum sufficient for a sound basic education. They indicated that adequate staffing for technology education would mean providing not just a single required semester of technology, but also sufficient electives so that students could attend basic and advanced computer classes, as well as handson instruction in classes in traditional areas that now involve technology, like shop and culinary arts. Several schools reported that they had facilities, equipment, and materials for technology classes that students were not able to use because of a lack of teachers.

⁸ Counts may add up to more than 33, reflecting the fact that 2 schools in our sample serve 2 grade ranges and are therefore subject to 2 sets of requirements.

5. Health Education Teachers

Twenty of the 33 schools reported that they lacked a sufficient number of certified and adequately trained teachers to meet the state's minimum requirements in health education (including 10 of the 12 NYC schools); this includes 8 schools that reported out-of-license teaching in this subject.

Elementary schools had the least adequate resources: 9 of the 11 K-5 schools said they could not meet minimum requirements in health; 8 of these schools reported that their classroom and physical education teachers lacked sufficient time and expertise to provide systematic or sequential health instruction. Many also said they needed a certified health teacher if they were to prepare students properly to meet state standards in this area. In the other school, there was a single ineffective health education teacher covering some of the grades, and they relied on physical education teachers for the others.

At the middle school level, 7 of the 12 schools in our sample that serve grades 7-8 lacked adequate staffing to meet minimum requirements in health education. This included all 5 of the NYC schools in our sample, none of which had a certified health teacher, and all of which reported providing students with little or no instruction in health. Four of the NYC high schools had no health teachers; 3 of them provided students the mandated one semester course by using unlicensed teachers, and the other provided this instruction through an online course.

Seven schools reported that they had sufficient certified health teachers to provide the mandated minimum health instruction but did not consider the minimum adequate for a sound basic education. Of these, the middle schools said they needed additional teachers in order to have reasonable class sizes in health and to provide a health class in each grade 6-8; the high schools said they needed sufficient teachers to provide health electives. Many schools that could not provide the minimum also indicated that they thought the minimum requirements were not sufficient. The principals and teachers in both the middle schools and the high schools cited increasing numbers of pregnancies, sexually transmitted infections, obesity, and mental health issues as reasons that the current level of health instruction they were able to provide was inadequate. Drug use, bullying, and violence were other issues affecting students' health and well-being that called for additional resources (see also Safe Orderly Environment).

6. Physical Education Teachers

Thirteen of the schools lacked sufficient teachers to provide students with the mandated physical education time. Eight other schools reported that their class sizes in physical education were too large, above 50 students per class, and, in some cases, up to 70 students per class. Three schools reported that 7 teachers were teaching physical education out of license, including 2 NYC schools that had no certified PE teachers at all. A number of schools also noted that because they lacked a sufficient number of teachers, students were no longer able to use auxiliary physical education spaces, like a weight room, dance studio, track, or swimming pool.

7. Family and Consumer Science Teachers

Of the 12 schools in our sample that serve students in grades 7 and 8, 7 lacked sufficient certified teachers to meet the state's requirements for formal instruction in family and consumer science in these grades. None of the 5 NYC schools with 7th and 8th graders provided any instruction in this area, and 2 other schools said they had enough teachers to provide only ½ unit of study in this subject, less than the minimum prescribed by the state regulations. High schools are also required to provide instruction to allow students to meet standards in child development and parenting, through separate classes in these subjects or as part of the

curriculum in health classes; 10 of the 12 schools that serve high school level students reported they lacked the staff to provide this instruction.

C. Library-Media Specialists

Of the 33 schools, 18 reported that they were unable to meet minimum requirements to provide all students with access to certified and adequately trained library media specialists. None of the 12 NYC schools reported adequate personnel in this area; 3 schools had no library and no librarian; 2 schools no librarian and, as a result, a closed library; 4 schools technically shared a librarian with other schools in their building or in another building but students had limited or no access and received no instruction in library skills. Of the 3 NYC schools in our sample that had libraries, 2 had no certified librarian and one lacked a sufficient number of librarians for the size of the school.

Of the 6 schools elsewhere in the state that were unable to meet minimum requirements in this area, 3 lacked sufficient librarians for the number of students in the school; 2 lacked adequately trained librarians (no media expertise) and one had no certified librarian at all.

Of the 33 schools, 9 were able to meet minimum library personnel requirements but did not consider the requirements sufficient for a sound basic education; 5 of these schools said that although they received part-time services from a librarian they shared with another school or schools in their district (which is all that is required), the amount of time the librarian was in their school not adequate to provide the range of library services and instruction students needed to meet standards in this area; the other 4 schools had at least one full-time librarian but needed additional personnel to meet the needs of the school's current population of students.

D. Academic Support Providers

Students who are below grade level or at risk of failing to achieve grade-level performance in one or more of the 4 core subject areas are entitled to additional instructional time and other academic supports to help bring them to grade level. Under the commissioner's regulations, these mandated services for all students who need them are called Academic Intervention Services (AIS). Each school must have sufficient and adequately trained personnel to ensure that students can be provided these supports. This area has been especially hard hit by budget cuts. As teaching positions are eliminated, licensed teachers working as academic support providers are moved into classrooms.

All of the schools in our sample serve large numbers of students below grade level, and our study found that *none* of them met this requirement. All 33 schools reported that, in one or more core subject area, they lacked enough capable teachers and specialists qualified to provide all of their struggling students with the expanded platform of supports they would need to reach grade level. Four schools said they provided no supports whatsoever in either ELA or math. Only 5 of the 33 schools reported sufficient, qualified academic support providers in ELA and only one did in math. Twenty-one schools said they had adequate personnel to provide some very limited supports in both ELA and math but not at the quantity or quality that would meet the needs of all of their students.⁹ In addition, 5 of these schools indicated that teaching assistants or other staff not certified or adequately trained for this work were providing supports.

⁹ Two of the schools that reported that they were providing some supports in both ELA and math were able to so only because teachers volunteered to provide tutoring and small group instruction after school and on Saturdays.

Because of limited funds and the accountability emphasis on English language arts and math, almost all of the schools lacked any additional instruction or supports in science or social studies for students who are not at grade level. Only 6 schools, nearly all large high schools, offered some supports in these areas, either in the form of Regents prep classes or online credit recovery programs; however, they reported that what they do provide is by no means sufficient to meet students' needs. In addition, 6 schools also reported that they are providing little or no academic intervention services to students with disabilities and English language learners because of a lack of qualified teachers.

Twenty-five of the schools reported that the personnel they assigned to AIS lacked sufficient expertise and training to understand and overcome their students' learning deficiencies. At the least, they needed resources to provide professional development to improve the ability of their academic support providers to differentiate the curriculum and properly support individual students.

No school said it was appropriately staffed to deliver a sufficient and appropriate Response to Intervention (RTI) program – a new federally endorsed approach for meeting student needs and reducing the need for special education referrals – to all students who needed this support. Twenty of the 33 schools reported that they were not implementing RTI at all and therefore could not assess what personnel an effective program would require. Many of these schools said they would need additional professional development before they could initiate a program, which is now mandated in New York State, as of July 1, 2012.

13 schools said they had teams evaluating students for RTI and were implementing a partial program using existing teachers and student support personnel. For lack of adequate appropriate personnel, some schools reported they were using music and physical education teachers, paraprofessionals, and student teachers to provide supports. Adequate personnel for RTI would also require additional guidance counselors, social workers, and psychologists, particularly bilingual staff; resource room teachers; reading specialists; and administrators to ensure appropriate monitoring. Many schools said they needed professional development in this area as well.

E. Substitute Teachers

Thirty of the 33 schools were unable to provide a sufficient number of qualified substitute teachers to ensure that students consistently receive a meaningful opportunity for a sound basic education. 24 of these 30 schools reported that the quality of their substitute pool was poor and a large proportion of the subs they hired were not adequately trained for their classrooms.

In addition, 16 of the 30 schools reported that they were unable to hire a sufficient number of substitutes, qualified or not, to cover all of their teachers' absences. In 10 of these schools, this was because they had no funds at all available to hire substitute teachers, while in other places, schools were unable to pay a competitive rate compared with neighboring districts. Hiring substitutes for absent teacher assistants was even more difficult. A number of NYC schools reported that, because the quality of substitutes is unreliable and funding is so tight, they avoid using subs almost entirely.

For lack of enough qualified subs, schools reported using a range of inadequate alternatives. Principals or other administrators step in, other classroom teachers are asked to volunteer to teach during their prep periods, special education teachers are taken out of team teaching classes, or teacher assistants teach classes. Some schools reported having regularly to use their AIS providers as substitutes, causing further strains and instructional disruptions in AIS supports. Several schools reported breaking up teacher-less classes and putting students into other classrooms and using "mass preps," sending multiple classes of students to the

auditorium, usually to watch a movie. Many schools reported that substitute shortages are particularly acute during testing periods, which can be as short as a few days or as long as a few weeks. During assessments, large numbers of teachers are out of their classrooms first to proctor and then to grade exams.

F. Administrators

1. Principals

All schools are required to have qualified full-time principals. Virtually all of the schools in our sample met this requirement, although, as a result of funding constraints, 2 schools had only a part-time principal. However, over half the principals in our sample said that they were not able to devote full time to the job of principal. Because of staffing losses due to budget constraints, these principals had to take on some or all of the duties that had formerly been the responsibility of an assistant principal, department head, dean, social worker, data specialist, teacher, technology support person, secretary or custodian.

2. Sufficient Assistant Principals, Coaches and Master Teachers to Provide Professional Development

For schools that serve a high-needs student population, the capacity to build the skills of their teachers to meet the learning needs of their students is of paramount importance. Yet, despite these overwhelming needs and the fact that these schools receive a disproportionate share of inexperienced and less qualified staff, every one of the 33 high needs schools in our study lacked the resources needed to provide teachers with sufficient continuous and sustained professional development to ensure that they remain current with the profession, and meet the learning needs of their students, especially those at risk.

Twenty-one of the schools reported that they needed additional instructional support staff – either assistant principals, instructional coaches, or master teachers – qualified and trained to provide professional development to teachers; in the alternative, they needed additional personnel in areas like discipline and administrative support who would lighten the principal's load and afford him or her time to provide instructional support. A number of schools reported that, because of budget constraints, they had put administrators, deans, and department heads back into the classroom.¹⁰

A majority of the schools said that, while they were receiving some professional development from a BOCES, their district, or, in NYC, their network, the quantity and quality of the offerings were not adequate. Half of the 12 NYC schools said that their networks were not meeting their professional development needs. In addition, it was widely noted that the popular, money-saving turnkey approach (where the school sends a single teacher or administrator for training and relies on him/her to train the rest of the staff) was not effective.

The schools also lacked funds for coverage to release teachers for professional development or to pay teachers "per session" to participate. Furthermore, the emphasis on "student growth" statistics in the state's new teacher evaluation system has made many teachers reluctant to leave their classrooms in someone else's hands. In part for this reason, many schools indicated that if they had adequate resources, they would provide ongoing, embedded professional development, using a coaching model.

¹⁰ One NYC school reported having 2 extra (and ineffective) assistant principals and being unable to excess them to free up funding to hire teachers.

Nearly every school also reported that there were too many competing priorities for the limited professional development time available. They were unable to address both school-level needs and state and district mandates. To meet the concentrated learning needs of their own populations of students from poverty or in crisis, and/or whose home language is not English language, principals and teachers in 23 of the 33 schools said they needed extensive teacher training in differentiation, curriculum development and subject area content, teaching literacy across the curriculum, effective academic intervention services, technology, cultural sensitivity, and family engagement. However, they reported being under pressure to use the limited professional development time they had to provide training in new state and district initiatives, including Common Core, Response to Intervention, the Dignity for All Students Act, Annual Professional Performance Review (APPR), special education reform, and the use of data to support instruction.

Several schools reported a compounding effect in the decline of teaching quality after successive years of staffing losses. Because collaboration with experienced colleagues, often improves teacher performance, as schools lost staff, and particularly as they lost their more effective and experienced teachers, the quality of teaching of the remaining teachers suffered. Similar effects resulted from the presence of large numbers of new or underprepared teachers. As one principal put it, "The elephant in the room is the retention rate. I used to think I could train teachers in one thing, then another, but there's too much turnover to do this." In the same vein, another NYC principal said that because of the large number of staffing changes between June and August, having one of the school system's few professional development opportunities in June was of limited value.

3. Sufficient Assistant Principals, Coaches, and Master Teachers to Carry Out the Mandated Annual Professional Performance Reviews and Professional Support Activities

Thirty of 33 schools reported that they lacked adequate staffing to carry out mandated annual professional performance reviews and related professional support activities. Twenty-six of the 30 schools said that in order to carry out teacher observations and follow-up activities effectively they needed additional qualified administrators or master teachers; in the alternative, they needed additional staff to free up the principals or other existing administrators to do classroom observations and post-observation meetings. Several schools reported that, because of budget cuts, assistant principals or departmental chairs had taken on teaching duties and lacked sufficient time now to do the performance reviews. In addition, 18 of the 30 schools said they lacked sufficient staff with the expertise required to provide the professional development necessary to implement the new performance review system. Many schools voiced concern that, without adequate resources for staffing and professional development, the system would not prove to be an effective approach for teacher development.

4. Sufficient Assistant Principals, Coaches, and Master Teachers to Provide an Adequate Mentoring Program for New Teachers

Of the 27 schools that had some new staff members last year, 8 reported that they lacked adequate staffing to mentor their new teachers. Five schools, all outside of NYC, provided no mentoring at all. Of the 12 NYC schools, 3 were unable to meet the city's mandate of a year of mentoring for new teachers; one school had no master teachers at all and 2 others were unwilling to take master teachers out of the classroom. One school expressed envy for a co-located school that was able to provide all of its new teachers with several weeks of pre-service training in the summer. Six other schools said they provided a year of mentoring to new teachers but did not consider that sufficient.

5. Sufficient Administrative Support Staff to Allow Administrators to Supervise Instruction and Ensure a Safe, Orderly Environment

As a result of budget cuts, 30 of the 33 schools (including all 12 NYC schools) reported that they now have an insufficient number of administrative support staff. One school reported having only half of the administrative staff it needed. With fewer school secretaries, data specialists, and technology support personnel, many duties formerly done by these staff now fall to administrators, leaving them less time for their regular duties.

Specifically, 24 schools reported that they lacked sufficient data specialists to provide timely analysis and dissemination of data trends. Instead of using data proactively to help plan and improve instruction and operations, the schools were able only to collect it for compliance purposes. Eighteen schools lacked adequate technical support personnel for proper maintenance and repair. Most of these schools have out-of-date technology that needs more maintenance work. This results in continuing delays in repairing computers, copiers, and other equipment. Fifteen lacked an adequate number of effective secretaries, and 7 of the 12 NYC schools reported needing additional school aides for clerical tasks.

G. Student Support Personnel

New York State requires that schools have adequate qualified personnel to provide students with a range of supports to mitigate physical and psychological impediments to a meaningful opportunity to meet state standards for students in high need schools. Specific requirements relate to guidance counselors, social workers, school psychologists, speech therapists, and school nurses and attendance personnel.

1. Guidance Counselors

Of the 33 schools in the study, 25 reported that they lacked adequate resources for a sufficient number of guidance counselors to provide all of their students with required services. Some schools had lost guidance counselor positions due to budget cuts, while others had never had an adequate number of counselors. Reported guidance counselor-to-student ratios ranged from 1:300 to 1:600, but all 25 schools indicated that their student populations needed more counselor time.

New York State requires that elementary schools provide all students with sufficient services from a guidance counselor to assist in program planning and to help with attendance, academic, behavioral or adjustment problems, and encourage parental involvement; to facilitate articulation to middle school; to provide support for academic intervention services and response to intervention services; and to provide a safe and orderly climate for learning.

Seven of the 11 schools serving elementary grades reported that they had insufficient numbers of guidance counselors. Two of them, despite having a high-needs student population, had no guidance counselors whatsoever. The other 5, while able to provide some mandated services for students with disabilities, lacked the guidance capacity to provide sufficient services to other at-risk students who need basic academic advising, counseling, and related supports.

Without an adequate number of guidance counselors, schools reported challenges in addressing student absences and tardiness, and lacked adequate support for improving student behavior problems. A number of these schools were concerned about their inability to provide students and families with sufficient guidance to make a successful transition from 5th grade to middle school, including support to select and apply to schools in districts where choices were offered. One school reported that, without a

guidance counselor, it was unable to address persistent lateness and attendance problems and could not provide a sufficient amount of behavior-related academic intervention support.

New York State requires that middle and high schools have sufficient numbers of guidance counselors to undertake an annual review of each student's educational progress and to develop individual high school/postsecondary education and career plans; provide (individually or in cooperation with class-room teachers) grade-level instruction about academic and career planning; facilitate articulation to high school/college; to help students who exhibit any attendance, academic, behavioral or adjustment problems; provide related services to students with disabilities; support academic intervention and response to intervention services; encourage parental awareness and involvement; and to provide a safe and orderly climate for learning.

Nearly half of the schools serving grades 6-8 (5 out of 12, 3 of them in NYC) could provide some mandated services for students with disabilities but lacked a sufficient number of guidance counselors to provide other students with basic required services. In these schools, students lacked guidance counselors to help with high school articulation, including selecting and applying to high school when a choice was offered or required. One NYC school reported that an assistant principal provided some guidance in the high school application process but the job truly required a qualified counselor. At another of these schools, the counselor had insufficient time to help develop the school schedule for each year, which was a core responsibility.

As a result of a lack of guidance personnel, these schools could not provide sufficient programming to build the appropriate levels of college and career readiness their students needed. One school received support from a college readiness program anchored at a local community college, but the program could accommodate only a small group of students.

Eleven out of 12 high schools reported that they lacked sufficient guidance counselor capacity to provide their students with the necessary college readiness counseling and college application support, even though students in many of these schools have no access to college-related supports outside of school. As one school said, "There are so many students who do not have personal experience with colleges or with people who have attended college." Two NYC high schools said that budget cuts had left them able to provide students little or no individualized college counseling. Due to staffing shortages, they provided all college counseling in large assemblies, instead of one-on-one or in small groups. Also, due to staffing shortages, many schools were unable to provide any college counseling before 11th grade, which several said was too little too late for their student population. Even schools staffed to ensure each student a one-on-one college meeting said there were no resources to follow up and help keep students on track.

Two high schools specifically referenced their inability to provide adequate guidance counselor staffing to address students' basic academic support needs such as helping students monitor whether they were meeting academic credit requirements and planning high school course trajectories.

Eight of the 12 school serving middle-schoolers reported inadequate numbers of guidance counselors to provide timely and appropriate counseling to their adolescent students experiencing personal or family crises or ongoing problems such as cyber bullying, peer pressure to engage in dangerous activities, absenteeism, and substance abuse. One middle-grades school reported that fully 60% of its students required ongoing intensive counseling support, individually and in small groups, as well as professional development for staff members on how to address student crises in classrooms.

At the high school level, 10 schools reported that they lacked enough guidance counselors to meet the social and emotional needs of their students. At one school the guidance counselor spent 2 days a week providing mandated counseling to students with individualized educational programs (IEPs) and other 3 days meeting the college-related needs of seniors. Other students at that school do not have access to guidance services of any kind, including crisis support. In one rural district, administrators counsel students in crisis without counseling training because, as a result of funding constraints, the district shares 2 guidance counselors among 3 schools. And yet, that district's high school reported that, as a result of reductions in mental health and social supports offered by regional agencies, students and their families were even more dependent than before on schools for these kinds of services.

2. Social Workers and School Psychologists

New York State requires that schools have sufficient numbers of social workers and school psychologists to help students who exhibit any attendance, academic, behavioral, or adjustment problems (middle and high schools), to support academic intervention services, and to provide a safe and orderly climate for learning.

Twenty-eight of the 33 study schools reported that they lacked adequate numbers of social workers to provide their students with these required services. Four of the 28 schools, despite their high-needs status, had no social worker on staff. (Three of them could call in a social worker from a local agency, but these agencies were themselves understaffed and often unable to address student and family needs, even in crises, in a timely fashion.) Three other schools reported that they had part-time social work services, sharing a single social worker with other schools.

Ten of the 28 schools reported that their social workers provided mandated services for students with IEPs and had little to no time to support other students and families; one school shared that its social worker lacks sufficient time at the school even to keep up with IEP-related responsibilities.

One high school reported that roughly 80% of its students and families are "high need." The school said it would need 7 additional counselors in order to reduce the student-social worker ratio to around 1:100, which would be an adequate and appropriate ratio for its population. It currently has one social worker to every 400 students, and many students go without necessary supports and interventions. Principals and other school staff reported that gaps in social worker services resulted in discernible negative consequences in learning, especially for their students with the greatest needs, such as those dealing with child abuse, neglect, homelessness, or those in need of mental health counseling and healthcare.

One school that could afford just one social worker but needed 3 reported that if it had sufficient social worker capacity, it would provide group counseling to students who were dealing with physical abuse (self-abuse or by someone else) or sexual abuse, pregnancy, drugs/alcohol dependency (one's own or within a student's family), and neglect. With adequate resources, another high school would hire a bilingual female social worker to focus on pregnancy prevention and reduce the growing number of pregnancies among its teenage girls. One school reported that its social workers once coordinated "child study teams" that would work closely with parents to develop plans to head-off behavioral problems and minimize the risk of dropping out, but no longer had sufficient staffing to do so.

Seven of the schools need but cannot afford to hire at least one bilingual social worker to serve their large numbers of families with limited English proficiency. One school that served close to 100 Spanish-dominant English language learners but had no Spanish-speaking adults in the building sometimes

resorted to having one of its elementary school students provide translation support to the social worker during crises involving parents with limited English proficiency.

A large majority of schools at all grade levels were unable to secure adequate school psychologist time for at-risk students needing psychological counseling. A full 29 out of 33 schools were unable to meet the mental health needs of students and/or to refer families to other resources as needed.

Seven out of 11 schools serving the elementary grades reported that they have a part-time psychologist and are sharing that person with several other schools in their district – or, in the case of some small NYC schools housed in "school campus" buildings, with as many as 5 other small schools – although they need at least one full-time person. Four out of 12 schools serving the middle grades found themselves similarly short staffed; in addition, one middle-grade school that had a full-time person needed 2 additional psychologists (one per grade) in order to meet its students substantial mental health needs. A full 8 out of 12 high schools had only a fraction of a school psychologist's time but needed at least one full-time person. Three additional high schools, each with enrollments exceeding 750 students, reported that they had a full-time school psychologist but needed at least an additional one in order to provide basic services to all of their students who needed them.

Four of the 11 elementary schools, one of the 12 schools serving the middle grades, and 7 of the 12 high schools reported that their school psychologist had time only to provide IEP-related services and had none to address the needs of other students – though 6 of these 12 schools, including an elementary school whose guidance counselor lacked sufficient time to monitor Response to Intervention services, said that this time was not sufficient to provide timely psychological testing to assess students' needs. Two high schools reported they were unable even to provide mandated IEP testing and evaluations, often falling behind with testing for disabilities and ongoing IEP reviews.

Among the students left without school psychologist support were those needing RTI monitoring, crisis counseling, and interventions for psychological distress resulting from abuse and other trauma. For example, one principal lamented the fact that the school was unable to provide critical psychological support to a high-performing student whose mother died and father could not respond to her needs. The student ran away, became pregnant, and suffered abuse, all of which the principal believed could have been avoided had appropriate psychological support been available at or through the school.

Most schools attributed inadequacies to staff numbers and staff time, but 3 elementary schools and 3 middle-grade schools mentioned psychologist effectiveness as a significant impediment to meeting students' needs.

3. Speech and Language Teachers

Three schools – one middle-grade and one high school – said that they were unable to provide enough speech therapy to meet the mandated requirements for this service on the IEPs of students with disabilities. Five of the 11 elementary schools reported that they were unable to meet the additional state mandate to provide speech and language improvement services to students with speech impairments of a severity that does not rise to the level of a disability requiring an IEP, but which does present a barrier to communication.

4. School Health Personnel

Schools must provide a sufficient number of registered school nurses or other health professionals to

undertake required medical exams and health screenings for all students, to inform parents and teachers of children's health conditions, to provide preventative health and first aid information to the school community, and to monitor health and safety aspects of school facilities. In our sample, 19 of 33 schools reported insufficient numbers of nurses or other healthcare professionals to meet students' basic health needs. Five schools mentioned that their nurses' hours, or one or more nurse positions, had been cut. In light of the greater-than-average medical service needs of students living in poverty, which describes the majority of students attending the schools in our study, this is cause for concern. One elementary school serving roughly 1,000 young children had lost 2 of 4 nurses. One large high school had one nurse to provide medical attention to over 2,000 students.

Bare-bones staffing in nurses' offices meant there was insufficient coverage for nurses out sick, at lunch, making work-related calls, or attending to record keeping or other administrative duties regularly and resulted in gaps in access to care for sick students at 5 schools. Three schools volunteered that the extensive health needs of their student and family populations could only be met through the creation of onsite health clinics that could provide basic health services and referrals, equipped as well as mental health and dental services.

H. Disciplinary and Safety Personnel

In order to ensure the proper implementation of the state anti-bullying law, district safety code, the school safety plan, and the provision of a safe and supportive school climate, each school must have a sufficient number of adequately trained disciplinary and safety personnel, including administrators and school safety officers.

1. Administrators and Deans

Almost half of the study schools (16 out of 33) lacked a sufficient number of assistant principals to help schools adequately implement their safety and discipline plans and ensure all students a safe and orderly environment. Five of 11 elementary schools, 4 of 12 middle-grade schools, and 7 of 12 high schools were under-resourced in this area.

Some assistant principals struggled to manage their administrative and instruction-related responsibilities because they were bogged down with disciplinary issues, essentially serving as de facto deans. "It's a struggle to find the time to get into the classroom to do pre-conference discussions, classroom observations, and observation write-ups. Discipline is a minimum of 50-75% of our time. There are not enough hours in a day," said one assistant principal.

Most elementary schools did not have a disciplinary "dean," and nearly half of the schools at the secondary level (12 out of 23) reported that they lacked an adequate number of deans to handle disciplinary issues and help foster a safe and orderly environment. Several of these schools could not afford to have even one dean on staff.

Due to funding constraints, some schools, though they still needed the disciplinary support, had to repurpose their deans – people who had received significant training in disciplinary procedures and creating safe and supportive learning environments – as classroom teachers or other instructional positions. At one school, the dean's schedule was split between teaching classes and addressing disciplinary issues, but the person was "spread too thin" to be effective.

Seven schools – 1 elementary school, 2 middle-grade schools, and 4 high schools – spoke of one major consequence of the sharp reduction of administrators trained and assigned to deal with discipline issues: the inability to prevent small behavioral problems and, when they occurred, to keep them from escalating, meant that when disciplinary infractions occurred they were more likely to be dealt with more harshly by school staff who were untrained or undertrained in appropriate intervention strategies, and students were more likely to receive severe consequences such as suspensions. One elementary school, on the other hand, reported that, due to disciplinary-staff shortages stemming from budget cuts, even extremely negative and disruptive behaviors by students were actually *less* likely to trigger interventions and consequences – because the inexperienced personnel who were now responsible for discipline lacked the time to address incidents in a timely, thorough manner and to complete any necessary paperwork.

2. School Safety Officers and School Safety Aides

A large majority of schools (25 out of 33) reported not having enough school safety officers to help maintain safety and a positive school climate. While just over half of the elementary schools (6 out of 11) reported deficiencies in this area, four-fifths of the schools serving the middle and high school grades, 10 out of 12 schools at each level, reported inadequate school safety officer support.

A number of schools said that the elimination of school safety officer and school resource officer (SRO) positions over the past few years has made their school buildings more dangerous and less equipped to deter major problems such as fights and criminal activity. Some districts that used to employ a single SRO shared among 3 or 4 buildings no longer have any SROs assigned to them.

Of the 33 schools in the study, nearly all (31 of 33) lacked a sufficient number of school aides to help administrators and school safety officers create a safe and orderly school environment. As a result, 4 schools – 2 middle-grade schools and 2 high schools – reported that they have experienced increased numbers of fights among students and increased numbers of physical injuries, and related reductions in instructional and social supports as other school staff are forced to plug gaps left by reductions in safety aide positions. A total of 13 schools – 3 elementary schools, 5 middle-grade schools, and 5 high schools – reported that they needed additional aides to monitor their cafeterias during lunch or to roam hallways and monitor building exits to deter negative behavior and ensure that students get to class on time,

At some schools, inadequacies in school aide staffing are not simply a function of numbers, but also of fit and preparation for the job. Of the 31 study schools, 8 reported that some or most of their school aides assigned to safety and discipline were ineffective because they lacked the skills needed to appropriately address negative behavior or to establish positive relationships with students that would prevent behavioral problems and promote a safe and orderly environment. Six schools attributed the poor performance of some security aides to the lack of adequate resources for initial and ongoing training in this area.

I. Attendance Teachers or Other Personnel to Promote Regular Attendance

Most of our study schools were hampered by low attendance rates, but 27 of 33 schools reported they were unable to meet the requirement to provide sufficient qualified and trained attendance teachers and other personnel needed to promote regular attendance. Most schools had a school aide or the equivalent monitoring attendance and an automated or other system of notifying families of student absences. However, schools lacked staff capacity to work with students and their families to improve attendance.

Eight schools reported that had no staffer dedicated to attendance issues, though they needed someone; 9 schools reported having someone only very part time; and 2 larger schools said they had at least one full-time attendance teacher but not a sufficient number relative to the size of their school population.

Many schools shared a single attendance officer, some with as many as 9 other schools. In NYC, the attendance teacher was often an employee of the network rather than the school, which limited schools' ability to improve their effectiveness.

All 27 schools with inadequacies reported that they needed additional personnel – attendance teachers, parent liaisons, or social workers, particularly bilingual staff – to do outreach to families and make more and earlier home visits when students have missed multiple days. In addition, the majority reported needing additional student support personnel, particularly guidance counselors, to provide mentoring and counseling to address students' issues quickly in order to prevent truancy.

Several schools also reported that they could improve attendance by providing sufficient academic supports, e.g., with adequate staffing for advisory periods for all grades, tutoring at lunch and after school, and sufficient academic intervention services.

II. Suitable, Up-to-Date Curricula

"A valedictorian here is unprepared compared to a valedictorian elsewhere."

— Rural high school principal

To meet constitutional requirements all students must have access to a suitable, up-to-date curriculum and sufficient course offerings to provide them a meaningful opportunity to meet the New York State Learning Standards in all required subjects (including the Common Core standards in English language arts and mathematics) at every grade level and to meet the high school graduation requirements.

A. Required Subjects

1. English Language Arts

Schools are required to provide students with sufficient instruction in English language arts (ELA) to meet learning standards each year they are in school. To graduate, high school students need 4 years of English. All 33 schools reported that they were able to provide sufficient instruction to meet minimum state requirements in ELA. However, many schools reported that their ELA curriculum was not yet aligned to the Common Core standards. In addition, 7 schools said that they lacked the resources necessary to provide the additional instructional time in reading and writing, and additional exposure to literature that their many high-needs students needed to meet state standards. Two high schools stressed the need to add writing labs that would afford students the opportunity to do more intensive writing and to apply the knowledge and skills acquired during the core ELA class.

2. Mathematics

Schools must provide students with sufficient instruction in math to meet learning standards throughout the elementary and middle school years. To graduate from high school, students need 3 years of math.

The high school math sequence must be at a more advanced level than grade eight, meeting the more demanding requirements in the standards for the Regents' high school exit exams. Thus, a student completing Algebra 1 ("Integrated Algebra") in 8th grade would complete at least geometry (9th grade), Algebra 2/trigonometry (10th grade), and precalculus (11th grade) as their required three-year sequence. That student could take calculus in 12th grade if his or her school offered that course, although the state currently does not require that schools provide students the opportunity to take a fourth year of math.

Three schools reported that they lacked adequate resources to meet the state's minimum instructional requirements in mathematics. One school serving the elementary grades reported that on some days students received no math instruction at all, and other days they received 30 minutes a day instead of the required 45. Of the other 2 schools that fell short of state requirements, both high schools, one lacked staff to offer precalculus and the other school could send only a small handful of students to take precalculus at an adjacent school.

At both schools, students who had completed Algebra in 8th grade and Algebra II and Geometry in 9th and 10th grade, respectively, did not have full access to the third unit of mathematics required for high school graduation.¹¹

Another 8 schools said that, while they were meeting minimum state requirements for curricular offerings and instructional time in math, this was insufficient to meet the needs of all of their students, particularly students who were below grade level or academically advanced. For example, one elementary school reported that although its students were receiving a sufficient amount of instructional time in math, the curriculum they used applied an outdated "spiraled" approach to teaching concepts and had insufficient supports to meet the learning needs of the students at that school; the school could not afford the \$150,000 it would have cost to replace the math textbooks and other materials and implement a more appropriate math curriculum. Also, at one high school with a large proportion of incoming 9th graders below proficiency in math, students needed 2 periods a day, rather than the one period a day the state required, to have a meaningful opportunity to meet state standards; however, the school lacked the resources to provide the extra instructional time.

3. Science

Adequate instruction to meet learning standards in science must be provided each year throughout elementary and middle school and, in high school, students must be provided with 3 years of science, at least one of which must be in the life sciences and at least one in the physical sciences, plus a lab experience. Of the 33 study schools, 13 reported they were not providing students with sufficient instruction to meet the state's minimum curricular requirements in science. Schools cited staffing shortages and pressure to boost ELA and math scores as the primary drivers of inadequacies in this content area.

Eight elementary schools failed to provide sufficient instructional time in science to meet the state minimum requirements. Several schools attributed their inadequate instructional time in science to having added whole-class instructional time in ELA and math in response to the increased pressure to boost test scores in these areas and the absence of other instructional supports for below-grade-level students (as well as the absence of standardized science exams before 4th grade). The dearth of consistent science instruction was most apparent in grades K-3, and tended to be remedied in 4th grade,

¹¹ Students in small NYC high schools with limited curricular offerings can, in principle, take courses at nearby schools. However, schools indicated that, in practice, this provided access to additional courses to very few students.

if only temporarily, in order to prepare students for the statewide science exam. Four of the 12 schools serving students in grades 7-8 fell short of meeting state curricular requirements in science, primarily because they were not able to provide adequate laboratory experiences to their students, either because of inadequate staffing or insufficient lab space. And one of the 12 high schools reported that it was unable to provide the required laboratory time for all students.

Four additional high schools were able to provide students with only the minimum required courses in science, but considered those minimum offerings inadequate for a sound basic education. Three of the 5 NYC high schools (including the school mentioned above that was unable to meet minimum state requirements) were unable to provide their students chemistry and/or physics classes, though they considered access to these courses necessary for college readiness. ¹² It is also worth noting that one of the 6 schools able to meet state instructional requirements in this area could not have done so without a sizeable private grant from a community partner.

In addition, other schools that did meet the state's minimum requirements had, as a result of funding constraints, eliminated science-curriculum-related trips and were unable to provide students with experiential science learning such as science-related excursions to the aquarium, park, or local farm. Those schools considered such experiences to be an essential part of the curriculum, particularly for students whose home lives provide limited opportunities for exposure to experiential science learning taken for granted by test preparers and textbook writers. Three elementary schools and 2 schools serving the middle grades reported that they were unable to provide the kinds of experiential learning opportunities outside the classroom that they considered essential for the conceptual understanding in science their students needed to meet learning standards.

4. Social Studies

Schools are required to provide students with sufficient instruction to meet learning standards in social studies each year they are in school. To graduate, high school students need 4 years of social studies (including one unit in U.S. history and one half unit of credit in Economics and a half unit of credit in Participation in Government.) Five of the 33 study schools were not able to provide their students sufficient instructional time or course offerings to meet requirements in this subject area.

Three elementary schools reported that they were not providing sufficient instructional time in social studies to meet minimum requirements. As in science, most of these schools had reduced the time allotted for social studies in order to shift instructional resources to ELA and math. Two middle-grade schools were also providing their students with less than the minimum required amount instructional time in social studies, in part because the schools had cut instructional time in that subject (in one school by an average of 60 minutes per week) in order to increase classroom time in ELA and math. At one of those schools, students had one required period of social studies instruction taken away each week so that they could participate in their once-a-week period of physical activity. Finally, one high school was unable to provide the required "Participation in Government" class; instead, students were forced to take an online government class unaligned with state standards.

An additional 13 schools indicated that they were meeting minimum requirements in social studies but

¹² Students in small NYC high schools with limited curricular offerings can, in principle, take courses at nearby schools. However, schools indicated that, in practice, this provided access to additional courses to very few students. The 2 schools that were unable to offer chemistry and physics reported that they enrolled a few students in those classes at nearby schools; they said that many more students would have taken the classes were they available at their own schools.

did not consider this sufficient for a sound basic education. One high school reported that it was unable to differentiate instruction adequately because it could offer only a single social studies learning "track," that was inappropriate given the wide range of academic performance levels in social studies at that school, the principal said.

Those 13 schools also included 3 elementary schools, 2 middle schools, and 2 high schools (including the high school with only one "track") that were unable to afford curriculum-related field trips to museums – historical, real-world opportunities they said were necessary in order for students to understand key social studies concepts. As one middle-school principal put it, "Students can read about [something] in a book, but places and people you might learn about in a book make more sense when you have a chance to experience them first hand." One of the 2 high schools reported that resource inadequacies forced it to choose between providing trips for academically advanced students best prepared to pass state exams or for struggling students who needed experiential learning even more in order to keep them focused and motivated and, in some cases, whose families lacked resources to take them on supplemental educational excursions. Interviewees asserted that cultural trips, including opportunities to learn about people from a range of social backgrounds and communities, are essential components of an adequate social studies curriculum.

5. The Arts (Visual Arts, Music, Dance and Theatre)

Of the 33 study schools, 14 lacked adequate resources to provide their students with sufficient instructional time or course offerings to meet state curricular requirements in the arts.

Nine of the 11 schools serving the elementary grades reported that they provide students with less than the minimum instructional time in the arts. For example, one elementary school was able to offer neither art nor music as part of its regular curriculum, and it lacked the necessary resources to pay external organizations to provide instruction in the arts. The other 7 elementary schools, including one that had lost its art teacher due to budget cuts, were able to provide some music and/or arts instruction, but fewer than number of hours per year recommended by the State Education Department. As one elementary school principal explained, eliminating or cutting back on arts instruction meant that many students' talents and skills went undiscovered, unrecognized, and undeveloped – and that students' interest in school-based learning waned.

One of the 12 schools serving the middle grades said it was unable to provide its students even one semester of visual arts and one semester of music in grades 7 and 8, the bare minimum required by the state. That school had neither a music teacher nor a visual art teacher, and provided no arts instruction, in part because its resources were exclusively devoted to meeting students' basic instructional needs in math and English language arts.

Two out of 12 high schools reported they were not able to meet the state's minimum requirement of one year of art, music, dance, or theater instruction. Both schools had to eliminate certified art teacher positions due to budget cuts – one school provided no instruction in the arts, while the other provided only one out of 2 required semesters.

In addition, one elementary school, 3 middle-grade schools and 2 high schools said they lacked sufficient arts, even though they technically satisfied the state's minimum instructional requirements. The principal of one of the 2 high schools reported that her students had to meet their art requirement through an online course for lack of resources to offer an actual art teacher. One school provided sufficient instructional time in the arts but indicated that its arts curriculum was inadequate because teachers were unable to expose

students to the arts through field trips to museums and hands-on learning experiences.

6. Career Development and Occupational Studies

State regulations require that schools provide sufficient instruction in career and occupational studies to allow students at all grade levels to meet standards in this area, without specifying required courses or a minimum amount of instructional time. However, secondary schools *must* offer students the opportunity to complete a 3- or 5-unit sequence in career and technical education. School staff underscored the importance of providing opportunities for all students to meet these standards.

Over half of the schools serving the middle grades (7 out of 12) lacked resources to offer any sequential or systematic instruction in this area. Of those 7 schools, 5 stated that they were able to offer no related instruction, while 2 were able to offer occasional "activities" and conversations with guidance counselors, but came nowhere close to helping students meet state standards.

At the high school level, 5 out of 12 schools lacked adequate resources to meet the state's minimum requirements; the other 7 stated that the minimum amount of career-related instruction their resources allowed them to offer may have been sufficient by state standards but was inadequate to appropriately expose their students to career possibilities and help them explore their options. For example, schools lacked staffing to offer a sufficient number of career and technical classes and to coordinate career-related internships and other job-related learning opportunities. Due to budget cuts, one school had to halve the number of students it sent to BOCES. The budget-driven elimination of specialized courses that had equipped students to secure full or part-time employment in a field of their choice after graduation was cited as a major problem. Also, hands-on learning and career-related trips, which were seen as key to developing students' understandings of the world of work and career options, had been eliminated.

7. Languages Other than English

New York State's requirements for foreign-language study are quite minimal: students must be provided with 2 years of study by grade 9 and one year in high school. In order for students to receive a Regents diploma with advanced designation, they must be able to take a three-year language sequence in high school. Nevertheless, 2 schools serving the middle grades offered no foreign language instruction at all, and 3 of the high schools did not provide students the opportunity for a 3-year language sequence.

An additional 9 schools reported that, though they were able to meet minimum curricular requirements in this area, they considered these requirements insufficient for a sound basic education. These schools sought, but lacked, the resources necessary to provide students with a 4-year sequence of language study, advanced placement language classes, and/or a choice of languages to study, all of which, some schools reported, would make students more competitive in college admission and job application processes.

8. Technology Education

State regulations provide that, over grades 7 and 8, students should receive one year of instruction in technology and, in high school, an additional year, which can be integrated with math and/or science. Four out of 12 schools serving the middle grades, and 3 out of 12 high schools, were unable to meet these minimum state instructional requirements.

In most cases these inadequacies were rooted in personnel shortages; other schools cited a lack of appropriate hardware and/or software. Educators were particularly concerned about their lack of adequate resources to help students meet the common core technology standards, which require students effectively and efficiently to produce research papers and deliver computer-based presentations.

Fourteen other middle and high schools reported that, while they met the minimum requirements, their students needed significantly more technology instruction in order to be adequately prepared for the postsecondary career and educational opportunities of today and tomorrow. As one high school principal put it, "We can't fulfill the students' need to be more marketable in technology." According to principals and other interviewees, students' additional instructional needs in this area included keyboarding classes, support in creating and delivering computer-based presentations, internet-based research, and computer programming classes – but schools could not afford to staff those kinds of classes. At least 3 schools had lost one or more technology staff positions in the past few years, resulting in fewer technology classes. Budget cuts forced one high school, which used to receive compliments from employers about its graduates' technological skills, to provide fewer technology classes and to cover computer-related certification exam expenses for far fewer students who would have been eligible for certification, an important sign of job readiness, were it not for prohibitively expensive exam fees.

Although the state has no specific instructional requirements for technology education for elementary schools, given the central importance of technology for college and career readiness today, most of the elementary schools said that it was important to begin technology education in the early grades. However, 7 out of 11 schools serving the elementary grades lacked the necessary resources to provide sufficient instruction in this area. Five of those schools were unable to provide any technology instruction beyond unstructured visits to a computer lab. Of the 2 schools that were able to provide some, but insufficient, technology instruction, one would provide a second period of computer-related instruction each week and the other would provide technology instruction for *all* of its students, instead of just some. Schools particularly wanted resources to equip their students with basic technology skills like keyboarding, internet-based research, and word processing.

9. Health

New York State schools are required to provide students in grades K-6 with a sequential health curriculum, and students in middle and high schools with a one-semester health course at each of those levels. Eight elementary schools reported they were not able to provide sufficient instructional time in health education to allow students the opportunity to meet state standards. Due to staffing shortages, 3 schools serving the middle grades were unable to provide a semester-long health course, as required by the state. And 2 of the high schools were unable to provide the required health instruction course. Students at one high school were offered an online health course, but had no access to instructor support. At the other high school, the required health course was taught by a staff member uncertified in health education.

Two additional middle-grade schools and 3 additional high schools reported that they met minimum state requirements, but without adding class time, a resource they could not afford, they were unable to meet the considerable health-instruction needs of their students.

10. Physical Education

Almost half of the study schools (16 out of 33) could not meet the state's minimum requirements for physical education (P.E.).

Elementary schools, which are required to provide physical education on a daily basis in grades K-3 and 3 times a week in grades 4-6, were in particularly dire straits. Not one elementary school was able to provide, each school year, the required amount of instructional time. Secondary schools are required to provide 3 periods of physical education 3 times a week in one semester and twice a week in the other. Four of the middle-grade schools did not meet these state minimum requirements and, although high schools fared better than the lower grades, one high school fell short of the minimum.

Four additional schools – 2 middle-grade schools and 2 high schools – reported that their instructional offerings in this area were adequate by state requirements but inadequate to meet their students' P.E. needs. For example, one middle school pointed out that, after budget cuts forced it to lay off its only female gym teacher, its girls' locker room was unsupervised and its young women students were left without an adult woman to answer personal health-related question. Physical education classes at one of the 2 high schools often exceeded 70 students, preventing educators from delivering proper instruction and supervision. With resources to hire an additional full-time teacher, the school would reduce P.E. class sizes to appropriate numbers and use auxiliary physical education spaces, such as its track and weight room, more frequently and effectively.

11. Family and Consumer Science/Home and Career Skills

State education commissioner's regulations require schools to provide three-fourths of a unit of study in home and career skills over the 7th to 8th grade school years, and instruction in child development and parenting skills as part of a health course in high school. Six of the 12 schools serving the middle grades did not provide the required course, while a seventh, hit with staffing cuts, could afford to provide only a half credit instead of the required three-fourths credits. Six high schools could not affirm that family and consumer science curriculum was actually being taught in their health courses, as mandated. Five of those schools, including one that used to provide home economics instruction to its student with disabilities in order to help them achieve self-sufficiency, reported that they offered no instruction in this area whatsoever. The sixth high school currently provides home economics only to its student with disabilities; other students do not receive the required instruction.

There was substantial sentiment at all levels that the state minimums in this area do not adequately prepare students to understand and successfully manage the responsibilities that the state's requirements were intended to address. Although there are no specific requirements for family and consumer instruction at the elementary level, educators at 3 of 11 elementary schools stressed the importance of equipping young students with at least basic financial literacy skills, and 2 of the 3 stressed the importance of teaching students about nutrition and preparing simple meals at an early age, particularly for children who may have fewer opportunities to acquire these skills at home.

Half of the high schools in the study reported that they were not providing students the instruction they need to effectively manage their future homes, gain basic financial literacy skills, and acquire basic workplace skills and knowledge. At one large high school, where nearly 2 dozen female students become pregnant each year, the principal stressed the importance of providing family and consumer instruction to the expectant parents there but lacked the necessary resources to do so.

12. Library and Information Skills

The only state requirement for library and information skills is for one period of instruction per week in grades 7 and 8. Nearly all (11 out of 12) of the schools serving the middle grades were not meeting this requirement. Almost half of those inadequately resourced schools (5 out of 11), all in New York City,

could not meet the requirement because they had no library media specialist. One of those schools was a small school on a campus (a building housing several small schools) where some schools (but not the study school) had access to the library and library media specialist. Of the other 6 under-resourced middle-grade schools, one has an effective librarian responsible for over 1000 students and another serves as the librarian for all elementary, middle, and high schools in the district—neither had time to provide the requisite information skills instruction and both barely had time to perform basic library duties, like circulating books and other learning resources.

The lone library media specialists at 2 other schools were stretched to the limit, each splitting his or her time between the aforementioned schools and other schools (one librarian serviced both an elementary and a middle school; the other a middle school and a high school). Insufficient funding prevented their respective school districts from providing each individual school its own librarian and, in turn, the required information-skills instruction. Of the final 2 schools, one was unable to provide appropriate library or information-skills instruction to its English language learners, and the other has a librarian but, due to budget cuts, lost its media specialist, who used to provide information-skills instruction.

Ten of the 11 elementary schools said they were unable to provide sufficient library access and library instruction to meet their students' needs, and 8 out of 12 high schools lacked the necessary resources to help students acquire the information skills they need in order to meet state standards in this area.

B. Elective Courses

The state requires that school systems provide access to a range of elective courses in order to help students acquire at least the minimum 22 units of high school credit required for graduation and deepen their subject-matter knowledge. Most public high schools in affluent communities around the state offer robust menus of electives sufficiently diverse to satisfy the interests of almost every student. By contrast, over 95% of our study schools serving the middle and high school grades (22 out of 23) reported that they lacked necessary resources to provide sufficient curricular choices, with some reporting that they could offer few or none.

All but one of the 12 high schools in our study reported that they were unable to offer students a sufficient number or choice of electives. Two offered no electives, 7 offered anywhere from one to a small handful of electives, and 2 large comprehensive high schools reported that they once were able to offer a solid menu of electives but have had to eliminate those choices due to budget cuts. The 2 schools that lacked resources to provide electives were forced to consign to study halls some 11th and 12th graders who had completed most of the core courses required for graduation. Some students in one school had as many as 3 study halls. Two other schools reported that budget cuts had forced them to eliminate all social studies electives over the past 3 years, while one school had been forced to halve its elective courses offerings, across all subjects, and another school had completely eliminated all electives for 9th graders.

Notably, the 2 high schools that were still able to offer a larger (though less than adequate) handful of electives, as well as the lone school that reported that it was adequate in this area, all were large high schools outside of New York City.

Of the 3 career-themed NYC high schools in the study, only one offered an elective (just one class) related to its theme and the other 2 offered none, even though their students specifically chose to attend those schools in order to prepare themselves for possible postsecondary studies or employment in the related professions. Only 4 high schools, none of them in New York City, were able to offer all their students the opportunity to take a four-year sequence in the arts, a category of electives required by the state. One other school could afford to provide this opportunity to some of its students, but staffing shortages forced it to exclude others.

Eleven out of 12 schools serving the middle grades said their students should have greater access to classes beyond the required curriculum, such as classes in computer technology as well as hands-on courses in traditional craft areas like auto-shop, woodshop, electrical shop, and metal shop. With adequate resources, one middle-grades school would create an ethics elective to "help students develop a moral compass." Other schools cited the need to provide students with educational options in the performing arts, such as band or chorus.

C. Preparation for Capable Citizenship

In 2003, the Court of Appeals, New York's highest court, held in *Campaign for Fiscal Equity (CFE) v. State of New York* that the state constitution requires New York State to provide all of its students "a meaningful high school education," one that will prepare them to "function productively as civic participants capable of voting [or] serving on a jury," and "to obtain 'competitive employment." To satisfy this constitutional mandate, schools need to provide students the opportunity to participate in extracurricular activities that foster the character traits and social experiences needed to function productively as a civic participant. Schools must also provide sufficient opportunities for community engagement in civic institutions to help students acquire civic knowledge and develop practical civic skills. Only 6% of the study schools (2 out of 33, both elementary schools) were able to provide students adequate opportunities to acquire basic citizenship skills.

1. Adequate Civics Curriculum

Despite the emphasis that the Court of Appeals placed on helping students become capable citizens, 24 of the 33 study schools (over two-thirds) reported that they lacked essential resources to equip students with adequate civic knowledge and skills.

At the elementary school level, almost two-thirds (7 out of 11) of the schools said they lacked adequate resources to equip students with a solid foundation of civic knowledge. Some educators were pressured to focus on test-related skills in ELA, math, and science, to the exclusion of citizenship and civics and, according to them, civic preparation was not a priority under the current accountability system. The principal of one of those schools stated that professional development designed to help teachers understand the value of experiential civic education in boosting test scores would go a long way toward expanding learning opportunities in this area. Two schools acknowledged that they would need extensive professional development in how to integrate civics education into the curriculum.

In the middle grades, 8 out of 11 schools lacked adequate instruction in civics. The resource-opportunity gap was even worse at the high school level: 10 out of 12 schools, including the high school mentioned above (see Social Studies) that could not offer students the required Participation in Government class, were unable to provide adequate civics learning opportunities. As one interviewee stated, "Students are underprepared be active civic participants in middle and high school and have, at best, a

¹³ Campaign for Fiscal Equity, Inc. v. State, 100 N.Y.2d 893, 907 (2003)(hereinafter "CFE II").

¹⁴ Id. at 905 ((quoting Campaign for Fiscal Equity, Inc. v. State, 86 N.Y.2d 307, 316 (1995)(hereinafter "CFE I")).

limited understanding of why it is important to be active in their communities (civic institutions, voting, etc.)." Some schools cited the intense preparation required to pass the social studies Regents exam as the main reason they had de-emphasized civics learning, a topic that is scarcely covered on the test, they said. "It would be better if they had to pass "civic engagement" than a Regents exam," one principal opined. Several schools stressed the need to create a separate civics class that would focus on civic leadership in contemporary society. "We don't only want them to be smart, we want them to be caring," said another principal.

2. Extracurricular Activities That Promote Civic Participation

Twenty-seven of the 33 schools said they lacked the necessary resources to provide sufficient extracurricular activities to offer students adequate opportunities to develop character traits and social skills that one needs to function productively as a civic participant.

Nine out of 11 elementary schools reported that their extracurricular offerings were inadequate. By far, the greatest barrier to providing civics-related extracurricular activities was the inability to hire teachers to advise and coordinate student government, clubs, athletic teams, and other experiential learning opportunities that help build civic skills. Some teachers used their planning periods for this purpose, but that left them with less time to prepare for the basic instructional responsibilities prioritized under the current accountability system.

Eleven of the 12 schools serving middle grades indicated that they lacked adequate resources in this area. Administrators at that level were concerned about their inability to provide experiential learning opportunities that encourage civic responsibility. As one principal stated, "students are academically well prepared. But they are missing the social component: competitive sports, the arts, expression, team building."

Of the high schools in the sample, 9 out of 12 lacked adequate resources to provide all students an appropriate range of extracurricular offerings. Budget cuts had forced most of the high schools in our study to slash their civics-related afterschool offerings, including athletics, Model United Nations, student government, and school newspapers. The lack of funding to pay for related fees and materials and to compensate teachers for assuming these additional responsibilities were among the most common problems. Lacking sufficient uniforms, materials, and staff members to supervise activities, a few schools offered one or more clubs but had to limit access to a small fraction of their student bodies. Community service programs were major casualties: in some schools, they were completely eliminated; in others, they were reduced to the point where faculty questioned whether they were providing the level of support and guidance that would actually help students develop essential civic skills and habits.

3. Opportunities for Civic Engagement

Schools that used to be able to take students to observe and interact with legislators, the courts, and other government and community institutions have had to eliminate many or most of those opportunities due to budget cuts. Of the 33 study schools, 27 said they could not provide students adequate opportunities to engage with civic institutions in order to build the knowledge and practical skills they need in order to function productively as civic participants.

Among schools serving grades K-6, nearly 8 out of 11 reported deficiencies in this area. Several schools noted that they used to be able to involve students in events exploring local history events and simi-

lar activities but no longer had the staffing to do so. "The more experiences they have, the more they understand rules and civic responsibilities." Of schools serving the middle grades, 8 out of 12 lacked resources to provide students with adequate opportunities to participate in civic institutions. In addition to a lack of funding for experiential-learning field trips and to compensate teachers for coordinating school-based civic clubs, principals cited the pressure to boost test scores as an additional impediment. "We would love to do all of these things, but need to make sure kids are passing state exams," said one. And yet, another noted, "[Students] need more hands-on knowledge of what's going on in the world, so they will understand current events."

Almost all (11 out of 12) high schools lacked the resources they needed to equip students with essential civic knowledge and practical skills to function productively as civic participants. The state legislature, courthouses, the mayor's office, the city/town council, and the local chamber of commerce were among the offices or institutions that schools said students should have a chance to observe and understand if they are to become active and effective civic participants. Administrators at one high school that required students to attend a meeting of at least one local civic institution each year asserted that students also needed exposure to state government, but the school lacked resources to provide that experience.

D. Preparation for College and/or Competitive Employment

As stated above, the state constitution requires that all students receive an education that not only prepares them for capable civic participation, but also one that equips them to obtain "competitive employment." Consistent with this constitutional mandate, the Regents also now require that all graduates of New York State high schools must be "college and career ready." In order to satisfy those college- and career-related requirements, all schools must be able to provide sufficient advanced, honors, college-level, and Advanced Placement and/or International Baccalaureate courses to provide all students a meaningful opportunity to compete for admission to competitive colleges; sufficient college counseling to provide students with a meaningful opportunity to apply for admission to college and to matriculate; sufficient access to career and technical training courses, internships, and career counseling to provide students a meaningful opportunity to obtain competitive employment; and sufficient involvement in extracurricular activities to help students acquire interpersonal skills needed for college and/or competitive employment.

1. Advanced, Honors, and College-Level Courses

Nine out of 12 high schools (including all 5 NYC schools) could not offer students the types of advanced course offerings such as honors, Advanced Placement (AP), and International Baccalaureate (IB) classes that competitive colleges want to see on students' transcripts. High schools' ability to offer advanced courses varied widely, both across schools and across departments within schools. While some of the larger high schools were able to offer adequate advanced learning opportunities in one or more core subjects, others offered almost none. Several schools reported that they have far more students eligible for advanced classes than they can afford to teach. One school has advanced opportunities in science and math but none in social studies and English. Students at some high schools that offered dual-credit programs at nearby colleges may have provided their students with an advantage in the college application process, but those classes were capped and some eligible students who wanted to take the courses were denied the opportunity.

Although all the high schools recognized the importance of meeting the needs of their academically advanced students, faced with a great range of student performance levels in a single classroom,

"teachers tend to be more worried about the kids who fall behind than the kids who are advanced." One principal stated that, "All the focus is on Levels 1 and 2." As a result, academically advanced students, insufficiently challenged by coursework pitched to a low or median performance level, "become less interested in school."

Over 90% of elementary schools and 75% of schools serving the middle grades acknowledged that they were unable to provide adequate opportunities for their academically advanced students. Some schools that embraced an achievement-based homogeneity needed resources to place academically advanced students in "gifted and talented" programs or in accelerated versions of regular classes. Schools served a diverse range of ability levels within each classroom needed smaller class sizes and effective professional development to help teachers differentiate instruction to their mixed-ability students. One educator argued that schools should be able to "provide the same level of tailored services for advanced students as is required for students with disabilities."

2. Advanced, Honors, and College-Level Courses

A full 11 out of 12 high schools reported inadequate resources to provide appropriate college counseling. Two of the high schools had experienced budget-related reductions in guidance counselor positions. Others had never had a sufficient number of counselors. The caseloads of existing or remaining guidance counselors had ballooned, and most of their time had to be spent on basic course counseling and crisis intervention, rather than detailed, personalized college counseling. Most schools cited the need for a full-time college counselor who could concentrate on supporting students' needs in this area.

Due to staffing shortages, many schools were now unable to provide any college counseling before 11th grade, which several stated was too little, too late. Staff at one school explained that meeting their students' needs would require "an additional counselor for freshman and one for sophomores. College doesn't become a priority until 11th or 12th grade, so students rush to catch up." And as a staff member at another school said, even in a school staffed to ensure each student a one-on-one meeting, there are "no resources to follow up and help keep students on track." One educator stated that more of their graduates would have attended either 2- or 4-year colleges if the school had been able to afford an adequate number of guidance counselors.

Schools serving the middle grades, and even some elementary schools, said that the cutbacks in guidance counselor staffing negatively affected students' opportunities to attend college later on. As one principal put it, "There are so many students who do not have personal experience with colleges or with people who have attended college." Another school suggested that middle-grade students would be more motivated in school "if they understood where their studies might lead them." Even short trips to colleges located in the same town as the schools were barred by resource challenges; as a result, principals said, students were exposed and drawn only to the types of jobs with which they were already familiar, often jobs occupied by family members.

Several elementary schools stated that it was their responsibility to prepare students for middle and high school cultures and expectations as an essential intermediate step on the way to college readiness. For example, interviewees at 2 schools said that, with adequate staffing, they would set up a program in which high school students would visit the elementary schools and speak with the younger students about high school expectations and college aspirations.

3. Career and Technical Training Courses, Internships, and Career Counseling

All of the 12 high schools reported they lacked adequate resources to provide all students sufficient job-related courses, internship support, and career counseling to prepare them to explore occupational options and develop postsecondary educational plans. Most often cited was insufficient guidance-staff time to provide more than a handful of students with adequate support for career planning. Some schools were able to send students to BOCES programs for hands-on job-related experience, but none could afford to provide access for all students who might have benefitted from these courses. In addition, one school said that, if it could provide more of these opportunities on site through its own instructional programming, it could offer students the benefit of a more integrated curriculum. Schools serving the elementary and middle grades said that they were no longer able to provide their students with career-related trips or small group discussions about college and career choices.

One high school could afford to support only 10-15% of its students in securing internships; 8 schools lacked any dedicated staff to help coordinate internships for students. Study participants indicated that they would need additional full- or part-time staff positions in order address students' learning and support needs in career preparation. Most schools indicated that hiring a college counselor and/or a "work-based learning coordinator" (as one school described the role) would allow them to adequately expose students to the worlds of college and careers.¹⁵

III. An Expanded Platform of Services for "At Risk" Students

"AIS has become a teacher saying to students, 'If you're willing to stay from 2:30-3:30' "

— Rural high school principal

Each school must provide an expanded platform of services for students at risk of low academic achievement. This includes access to pre-kindergarten and kindergarten programs, academic support and appropriate non-academic support services, including guidance, counseling, family engagement and health services.¹⁶

A. Sufficient and Appropriate Academic Intervention Services (AIS), and/or Response to Intervention (RTI), and Other Nonacademic Support Services

1. Additional Time on Task

Students whose academic performance is below grade level or who are at risk of failing to achieve grade-level performance in one or more of the 4 core subject areas are entitled to the additional instructional time and other academic supports they need to bring them to grade level. Each school must have adequate resources to provide "sufficient and appropriate additional instruction during the regular school day or extended day, as well as through afterschool and/or Saturday, extended year or summer programs" to meet their students' needs.

¹⁵ The overwhelming majority of schools also lacked sufficient extracurricular opportunities to allow students to develop the interpersonal skills needed for college and career readiness. (See discussion under Capable Citizenship.)

¹⁶ Our study did not cover pre-kindergarten services since these were often provided in community facilities and not in the elementary schools we visited. Health services are covered in School Health Personnel above.

Of the 33 schools, none reported being able to meet this requirement. No school had adequate resources to provide students with the extra academic support to which they were entitled, either during the school day, or through after-school, Saturday, or summer programs. As a result, struggling students who could be meeting state standards if provided appropriate support continued to perform below their potential.

a. During the Regular School Day or Through Extending the School Day

All 33 schools reported they lacked adequate resources to provide sufficient academic supports during the school day or through an extended-day program. One large high-needs high school reported that it provided no academic interventions services (AIS) or supports at all. Twenty-three schools reported that they provided some additional instruction in smaller groupings during the school day or in extended-day programs for their AIS-eligible students but what they were able to provide was not sufficient to meet all students' needs.

Twenty schools reported that, because of staffing constraints, they were unable to provide enough additional instructional time to their struggling students. Twelve schools reported that their instructional groupings were too large to be effective, citing group sizes of up to 24 students. Eight schools provided additional instruction to all students through extended or double periods of ELA and math; however, this strategy constrained their ability to provide sufficient instruction in other required subjects.

Ten schools reported that, because of funding constraints, they could provide additional academic supports only to a fraction, usually less than half, of eligible students. As one principal said, "We have to choose how to save the largest number of kids, because we don't have what we need to save all kids."

Four schools provided some additional instruction to struggling students in ELA but were unable to offer any in math. Twenty-three of the 33 schools offered no AIS in science or social studies; however, in 9 of the 10 schools that offered some support in one or both of these subjects this support amounted to only a limited amount of preparation for the Regents exams in these subject areas.

Another worrisome finding was that 20 schools reported that they lacked a sufficient number of adequately trained teachers to provide the required academic intervention services. In some schools, ineffective or inexperienced teachers instead of specialists provided these critical services. Some schools used teaching assistants or paraprofessionals, for lack of enough teachers or specialists. Other schools relied on computer software or online programs. Five schools said that their AIS providers, both specialists and regular classroom teachers, needed additional professional development to build the expertise needed to work effectively with their students in need of AIS. One principal said that, until teachers had 4-5 years of teaching under their belts, they lacked the necessary expertise to provide high-quality instructional support to struggling students.

Several schools noted that, lacking sufficient numbers of academic support providers, they were forced to use a "pull-out" model that they considered counterproductive because it resulted in the students with the greatest instructional needs having the most disrupted and fragmented school days. With adequate resources, those schools would hire enough staff to have specialists working with these students in each classroom.

Ten schools said that, if adequate resources were available, they would implement an extended-day program in order to provide sufficient academic intervention services. However, nearly all of the schools (most of them in NYC) that were able to operate a limited extended-day program adding only 37 minutes of AIS reported that this practice was inadequate and inefficient. Most of these schools found that end of the day dismissal procedures together with the transition into the extended-day program used up nearly half of the allotted additional time. One school that ran a robust extended-day program, thanks to funding from a grant, said that it could have made better use of those funds if they were simply added to its regular budget.

b. AIS Through After-School and/or Saturday, Extended Year or Summer Programs

No school reported adequate resources to meet AIS requirements through after-school, Saturday, and/or extended year or summer programs.¹⁷ Of the 33 high-needs schools in our sample, 4 reported they were unable to provide students with academic support outside of the regular school day and year. As a result of funding constraints, 6 additional schools said they were no longer able to provide any after-school academic support; 12 schools said they were unable to provide a Saturday program; and 4 schools said that summer school had been eliminated.

Fourteen schools said they were able to provide some but not sufficient after-school academic intervention and support services to improve academic achievement. Nine of these schools reported that, because of funding constraints, they had to limit the number of eligible students who could participate in programs that were still operating. Some of these schools provided services only to students farthest below proficiency and other schools chose to serve students closest to the proficiency cut off. The majority of these schools had cut back the hours, days, or weeks of after-school supports due to funding constraints, with some schools offering only a few weeks of after-school programming, often in the form of test prep. Seven schools reported that teachers were providing students with after-school academic support, like tutoring, without compensation.

Seven schools were providing some Saturday programming but, because of budget cuts, the programs were operating for only a few months out of the year. Two of these schools said they were able to keep the programs running only because teachers were willing to provide Saturday programming without compensation. Although 15 schools were able to operate summer-school programs, school administrators acknowledged that many of those programs were not meeting students' needs because they were limited to certain grades or had limited or inadequate academic programs enough to meet students' needs. Of those 15 schools, 3 reported using online software for credit recovery during the summer, a money-saving approach that they believed was not effective for their students.

A major problem cited by 15 schools was a lack of transportation for after-school or Saturday programs. This limited both enrollment and attendance of those who did enroll.

Schools also indicated that their inability to embed recreational and experiential enrichment components in their after-school, Saturday, and summer programs limited attendance and student motivation to participate in these programs.

¹⁷ A number of high schools reported that if adequate resources were available they would provide extra academic services during the day or through a mandatory extended day, since there were too many other competing priorities, including jobs and family responsibilities, for their students to make use of services offered on a voluntary basis in after school or on Saturdays.

2. Sufficient and Appropriate Response to Intervention (RTI)

Response to Intervention (RTI) is a new initiative favored by the federal government and now mandated in New York State. It calls for tiered levels of intervention, geared to individual needs, in the early grades, in order to deal at the outset with potential academic problems and, among, other things, avoid the need for special education referrals. Two schools reported that RTI had in fact, resulted in reduced special education referral rates, others indicated that students who received sufficient RTI supports were less likely to need academic intervention services.

However, not one of the 33 schools in our study reported that it was equipped with adequate resources to implement the full-scale RTI procedures necessary to comply with the state's mandate or to meet the needs of their students. As noted earlier, 20 of the 33 schools had no RTI system or services at all, citing a lack of resources for administrative and teacher time, training, and expert personnel as barriers to implementation. Of the 13 schools that provided some type of RTI, no school was able to implement it fully.

As a result, nearly all schools reported being unable to serve the full number of students who needed intervention. Some schools were forced to provide academic support by inadequately trained staff, like teachers' aides, or in groups that were too large to be effective. Some schools were conflating or substituting RTI services for AIS and other useful academic support programs, instead of creating a complementary system. And many schools reported lacking the administrative time, personnel, expertise, and data management systems need to track, monitor, and manage the interventions employed.

A lack of adequate resources hampered even the one school in our study with the most robust implementation of RTI. This school was using a child-study team and providing both behavioral and academic interventions in the classroom and by deploying student-support personnel, administrators, and family engagement, all-important components of an effective RTI system. Nevertheless, educators at this school reported that RTI implementation was not as efficient and effective as needed, because staff shortages required them to provide many of the extra services through a pull-out model, which complicated scheduling and forced students receiving multiple supports to miss valuable class time.

3. Sufficient and Appropriate Nonacademic Support Services

Effective AIS and RTI require sufficient and appropriate support services, including guidance and counseling, coordination with services from other agencies, services to improve attendance, and study skills to address barriers to academic progress. The study schools also lacked adequate resources to provide these services.

B. Sufficient Family Outreach and Communication

To ensure sufficient support for students who are at risk of low academic achievement, New York State requires that all schools engage in sufficient family outreach and communication, and provide translation services as needed, to enable parents to be actively involved in their child's education at school and to support their child's learning at home. Unfortunately, the schools in our study overwhelmingly lacked adequate resources to perform this essential function. Due to staffing shortages and other resource-related challenges, none of the 33 study schools was able to engage students' families in supporting student achievement by providing the necessary personnel, communication systems, and translation services.

1. Personnel

All but one of the 33 study schools reported having insufficient personnel time and expertise to meet state requirements to partner with families. The specific personnel-related inadequacies ranged widely, but the most common barrier cited was the need for targeted professional development for teachers on how to communicate and collaborate effectively with families. Twenty-six of the 32 schools were deficient in this area. Notably, the most common need schools reported was in the area of training for teachers to relate to families with divergent racial, ethnic, and socioeconomic backgrounds: 12 schools reported needing additional resources to help teachers better understand the cultural identities of, and the poverty experienced by, many students and their caregivers.

At 16 schools, including 13 of the 26 schools mentioned above, instructional staff lacked the time to communicate appropriately with parents regarding their children's learning needs, strengths, and progress. Among those 16 schools were 10 schools that specifically mentioned the need to find more time for teachers to visit students' homes. After fulfilling basic instructional and student support responsibilities, educators had little or no time to make phone calls, send emails, and take other steps to maintain productive relationships with families. The lack of parent coordinators or family liaisons at 7 schools and the excessive caseloads of those staff members at the other schools were also cited as significant ongoing challenges. In addition, nearly half of the schools with inadequate personnel-related resources in this area (15 out of 32) reported that they were unable to provide parents with sufficient training to help them understand school expectations and policies.

2. Communication Systems

Across the study, 30 out of 33 schools, lacked adequate resources to develop and maintain effective school-family communication systems. Budget cuts had forced 10 of the schools to reduce the frequency of school newsletters, causing significant delays in transmitting important information to students' caregivers. An additional 5 schools reported they had reduced the frequency of mailing students' progress reports. Some of this information was emailed or posted on school websites, but 4 schools noted that many of parents could not afford to purchase and maintain computers, and that many of those who could lacked the resources to purchase internet access.

Also, parent attendance at school-based workshops, trainings, and meetings suffered at 21 schools because they could not afford to help defray transportation costs or provide childcare for parents who could not leave their children home alone. Ten schools noted that maintenance of up-to-date addresses and telephone numbers—critical for the highly mobile population at many of these schools—has suffered due to budget cuts. And 11 schools said they lacked accessible and appropriate facilities for confidential meetings with individual families and for larger parent meetings.

3. Translation Services

Overall, 24 out of 33 schools, more than two-thirds, lacked adequate translation services to communicate with families with limited English proficiency. Four of the 24 schools, all high schools, stated that they could provide no school-based translation support, although 2 of the 4 occasionally were able to access limited volunteer support from local college students and professors who possessed at least some of the required language skills. Twenty other schools were able to provide only insufficient or inconsistent translation support. Of those 20, 12 utilized the language skills of school-based educators or district-level translators to facilitate communication in some languages and dialects spoken by their students' caregivers; parents who spoke languages or dialects not covered by those personnel

remained disconnected from their children's schools.

Lacking adequate resources to translate important documents into the full range of languages spoken by students' families, 2 schools began stapling to important English-only documents brief, generic messages in various languages recommending that families find someone to translate the message for them. Finally, 4 schools—one elementary school, one middle-grade school, and 2 high schools—shared that they regularly asked their students to translate important messages to specific families; however, students would sometimes intentionally or unintentionally translate the messages incorrectly. The schools acknowledged that enlisting students' to translate private information breached confidentiality, but in emergency situations, those schools lacked alternatives.

IV. Adequate Resources for Students with Extraordinary Needs

"You have to make the IEP match what you can offer when you don't have the resources to provide what they actually need."

— Small city elementary school principal

"In general, too many kids are labeled as students with disabilities just because they are behind."

- NYC high school principal

A. Students with Disabilities

1. Sufficient Certified and Adequately Trained Teachers and Other Instructional Staff

Of the 33 schools, 30 said they lacked adequate resources to provide a sufficient number of certified and adequately trained teachers to meet the needs of their students with disabilities. Nineteen schools reported that, because of funding constraints, they had lost or were unable to hire enough special education teachers. In the majority of these schools, this resulted in students not receiving appropriate instruction and support; in many cases it resulted in violations of state requirements or of the requirements of students' individualized educational programs (IEPs).

Due to personnel cuts or funding constraints, a number of schools reported that students with disabilities were placed in inappropriate settings. One school reported that formerly "self-contained" students were assigned to an inclusion class, though they were 3-4 grade levels below the rest of the students; in another self-contained class, students were moved into an integrated setting purely for budgetary reasons. Two schools reported that students were being taught in self-contained classes with broader ranges of ages and abilities than regulations allow, creating a more difficult environment for both teaching and learning; and 3 schools reported that they could no longer provide students with required levels of support from a SETSS (special education teacher support services) or resource room teacher. One of these schools had no SETSS teacher at all and, though special education teachers provided some services to students during their administrative periods, this was not sufficient to comply with students' IEPs.

Eighteen schools reported that a sizeable number of their special education teachers were not adequately trained to meet the needs of the students in their classes, in many cases because their content knowledge was weak. The percentage of teachers said to be ineffective ranged from under 10% to a high of 80%, with a mean of 35%. On average, schools estimated that 20% of these teachers could

become effective given adequate professional development and supports.

A number of high schools reported that they lacked sufficient teachers who were dually certified and/or had sufficient content expertise; budget cuts in some schools disproportionately affected dually certified teachers, who were often recent hires. As a result, students were often not sufficiently challenged or engaged. Two schools reported that some students with disabilities were limited to less rigorous courses and fewer course offerings, but 2 other schools said that, for lack of a teacher with adequate content expertise, students were mainstreamed for a core subject with insufficient support.

Yet, nearly every school reported that it lacked sufficient professional development for its special education teachers. Three schools, because of budget cuts, had recently lost special education supervisors or coordinators who were their main in-house sources of training. One school said its special education teachers received no professional development whatsoever. Five NYC schools said that the professional development provided by their respective school-support networks was inadequate and focused only on compliance with mandated topics, and a number of schools elsewhere in the state said that the professional development provide by their BOCES was weak in special education. Nine schools said that they needed on-site instructional coaching for their special education teachers, with one school noting that the current PD model that takes teachers away

Schools reported the need for resources to bring in external expertise to improve teachers' skills. Among the areas mentioned by multiple schools was the need to strengthen content knowledge; to provide training to work with students with more severe diagnoses; and to improve differentiation. Seven schools said they needed to be able to provide additional training for general education teachers, including but not limited to those who co-taught in integrated settings, on strategies for supporting students with disabilities.

A number of schools around the state reported that other personnel cuts had also affected their ability to meet the needs of students with disabilities. Three schools had recently lost their special education coordinator or supervisor, and 2 of those said that as a result, students, including declassified students, were not consistently receiving their required accommodations. Four schools said they lacked adequate bilingual support personnel to meet the needs of their students with disabilities who were English language learners. Two schools said they were not providing IEP-mandated aides for some students, and 3 schools said they no longer had enough teaching assistants to support special education classes.

Several schools said that students' IEPs were written around the resources schools could afford, rather than what students actually needed; one resource-stressed special education coordinator lamented from the opposite perspective that the school-based support team wrote IEPs "without knowing what schools have the resources to provide."

One NYC school that was otherwise meeting requirements for students with disabilities reported that its SETSS teacher had a 38-student caseload. Although the maximum caseload allowed throughout the rest of the state is 25, in New York City the maximum is 38, which the school considered too large to serve all students appropriately.

2. Suitable Curricula

Of the 33 schools, 27 said they were not providing their students with disabilities with suitable curricula and an appropriate expanded platform of academic and other support services. Of these, 11 schools

said that both their general education and special education teachers serving students with disabilities struggled to differentiate the curriculum appropriately to meet the learning needs of these students. For example, schools said that co-teaching teams often did not plan or work together effectively, did not provide sufficiently rigorous instruction for these students, and lacked an understanding of how to assess their learning appropriately.

Several schools in NYC said they lacked adequate expert curriculum development guidance from the NYC Department of Education, particularly given their large numbers of inexperienced teachers on staff. As one principal said, "These teachers should be spending their time figuring out *how* to teach and instead have to spend their time figuring out *what* to teach."

Two schools said that large classes that contained too broad a range of reading levels and/or too wide a range of types of disabilities contributed to teachers' difficulty with differentiating instruction in order to support all of their students.

Seven schools reported that as a result of funding constraints and staffing cutbacks, they were unable to provide their students with disabilities with sufficient access to experiential learning opportunities, such as hands-on science and arts activities, career and technical education classes, work-study programs, and life skills classes. One school said that it lacked adequate resources to provide an appropriate curriculum for its most struggling students or its high achieving students and to make choices between providing curricular offerings for students with disabilities and advanced courses or electives for academically advanced students. As mentioned in the previous section, the lack of sufficient dually certified science and math teachers limited the curriculum for students with disabilities in 2 schools, and it pushed students with disabilities into mainstream classes in 2 others.

Ten schools said they were not able to provide their students with disabilities sufficient academic intervention services, including after school and during the summer, largely for lack of a sufficient number of qualified providers; one school said that 90% of its students with disabilities qualified for the same amount of AIS as its general education students but "few if any" were receiving it. But a number of schools also cited problems with students' IEPs, saying that they did not provide students with adequate supports to succeed.

A number of schools said that limited transportation prevented students with disabilities from taking part in academic and extracurricular programs offered after school.

3. Suitable Facilities

Of the 33 schools, 20 reported they lacked appropriate facilities for their students with disabilities. Sixteen of these reported that they were not fully accessible to mobility- impaired students or staff. In 8 of these schools, students with disabilities lacked access to facilities like the playground, swimming pool, computer room, or bathrooms in specific parts of the school. Eight buildings were completely inaccessible, lacking ramps, elevators, and accessible classrooms and bathrooms. One school was generally accessible to students in wheelchairs but lacked a lift to the auditorium stage; ironically, another school in the same district that was otherwise completely inaccessible—it could only be entered via stairs—had a state-of-the-art wheelchair lift from the auditorium to the stage.

Five of these 16 schools and 4 additional schools said that their facilities were not adequate for students with disabilities other than mobility impairment. One school lacked an appropriate quiet or safe room for its students with behavioral issues; 3 schools lacked appropriate space for services like physi-

cal therapy and adaptive physical education and provided them in hallways or other public areas; 3 lacked appropriate private and quiet spaces for providing pull-out instruction and for testing all of their students with accommodations; and 2 reported that they had special education classrooms that lacked the appropriate square footage, including one that was formerly an office.

4. Appropriate Class Sizes

Schools must have adequate resources to provide students with disabilities appropriate class sizes.¹⁸ Some 10 schools said inclusion or ICT class sizes for students with disabilities were oversized: 8 schools reported that their inclusion classes were above the court's specifications. One of these and one additional school said some of their inclusion classes had more students with disabilities than general education students. Two schools, both in NYC, said that some of their integrated collaborative teaching (ICT) classes had more than 30 students. Seven additional schools said their classes for students with disabilities did not exceed requirements but considered their class sizes inappropriately large for their high-needs student population.

5. Appropriate Instructional Materials

Fourteen schools reported they lacked sufficient and appropriate instructional materials for their students with disabilities. Many of these schools had needs in more than one subject area.

Ten schools lacked sufficient books, software, and other reading materials to diversify reading levels appropriately to meet the needs of their students with disabilities; in particular, there was a shortage of high-interest, low-reading-level materials. Two school staff members said that they each spent over \$1,000 of their own funds in the past year to buy such materials for their students. One school reported that it lacked enough books for its students with disabilities to take science or social studies texts home.

In addition, 10 schools said they lacked sufficient up-to-date adaptive technology for their students with disabilities, including laptop and desktop computers and tablets (including one school that did not have a computer for a student who could not write by hand); they also said teachers needed professional development to use this technology appropriately. One NYC school reported that it routinely seeks alternatives to adding assistive technology (or paraprofessionals) to students' IEPs because the related costs would come out of the school's already strained budget.

B. English Language Learners

All schools that serve English language learners (ELLs) must have sufficient resources and appropriate services, programs, personnel, and materials to ensure ELLs opportunities to achieve the same educational goals and standards as the general student population.

There are study data about services for English language learners for 27 schools.¹⁹ The percentages of English language learners in these schools ranged from 1% to 42%, with an average of 15.6%.

¹⁸ For students in self-contained special education classrooms, class sizes are mandated based on students' IEPs. For students who are mainstreamed in inclusion classes, the court's recommendations apply (see Class Size). Throughout the state, many students with disabilities now receive instruction in integrated classes with a team of one general education and one special education teacher. For these integrated collaborative teaching classes where there are 2 teachers, a larger class is acceptable. Though there is a as yet no legal guide for this, we have taken as an adequacy benchmark the class size that was used in the demonstration programs that initiated the program, which was 28 (20 general education students and 8 students with disabilities).

¹⁹ Five schools had no English language learners, and, in one co-located school, ELLs were served by another school in the building.

1. Instructional Personnel

Of the 27 schools, 11 reported they lacked a sufficient number of English as a Second Language (ESL) teachers to provide all of their ELL students with the required amount of language arts instruction and the content-area instructional support that the state requires: 7 schools said that their current ESL teaching staff was unable to provide sufficient time in language arts instruction or content-area support (including one that had no ESL teacher for half the year), and 4 said they were providing the required amount of language arts instruction but would need more teachers to provide content-area instructional support.

An additional 2 schools said that some classes for ELL students were taught by teachers who were not certified in bilingual education or in ESL.

Two of the schools already mentioned and 3 other schools said they were hampered by a large number of teachers (between a third and a half) who were not adequately trained or effective.

Five schools said they lacked sufficient and appropriate translators to properly accommodate their ELLs during state testing.

Six additional schools said they had a sufficient number of teachers to meet state requirements regarding their ELL students but considered the requirements inadequate to provide them a sound basic education. Four schools that said that, for lack of enough ESL teachers, they were forced to use a pull-out model to provide instruction rather than the more effective push-in model; 4 schools said their class sizes or instructional groupings were too large to meet students' needs effectively (as did 4 schools that lacked sufficient teachers to meet minimum requirements); and one school said it was unable to provide needed services for its former ELLs, which is supported but not required by the state.

Finally, 6 schools were concerned that they lacked adequate resources to manage the large overlap between their English language learners and special education. Three schools said they lacked bilingual staff to evaluate students for special education services appropriately. One school said it lacked the staff to "separate the students who are ELLs and disabled from those who simply need ELL support." This school and 4 others said they lacked appropriate staff to provide services to students with disabilities who were not yet proficient in English.

2. Support Services

Schools must be able to provide all English language learners with sufficient and appropriate support services that will allow them to achieve and maintain a satisfactory level of academic performance. Such services may include, but need not be limited to, individual counseling, group counseling, home visits, and parental counseling. Where appropriate, such services should be provided in the first language of the pupil and the pupil's parents.

A total of 24 schools said they lacked appropriate resources to meet the requirement to provide ELLs with sufficient appropriate student support services. Of the 24 schools, 17 reported they had no bilingual student support staff, though their ELLs had a need for such services. All of these schools said that, with adequate resources, they would add bilingual guidance counselors, social workers, and/or school psychologists. One school also said it needed a bilingual dean and attendance teacher. Two schools said that, without these personnel, they were unable adequately to evaluate the needs of their ELL students, including possible needs for special education. As one school said, "With a bilingual guidance counselor, we would be able to tease out which kids need special education and which just

need language support." Three schools said they were particularly hard pressed to provide supports for their non-Spanish speaking ELLs.

Seven schools said they had some bilingual support staff but not a sufficient number to meet students' needs. Without enough bilingual counselors, one school said, "many student needs are going unmet and many negative behaviors unattended." Specific needs schools noted were for a bilingual female social worker for a high school that had none, for a bilingual crisis counselor, and for a bilingual school psychologist to evaluate students for special education, provide testing accommodations for students, and ensure that families understood the full implications of special education for their children. (Without bilingual personnel, it was reported that parents were being asked to put students in special education "to give them extra help.") Another school reported it had bilingual student support personnel but not enough: these staffers had no time to see students without IEPs. Finally, a large high school with a full-time bilingual Spanish guidance counselor said that it also needed a bilingual guidance counselor who spoke the South Asian language used by a large percentage of its students and families.

3. Curriculum

As mentioned above, 7 schools said they were not providing sufficient language arts instruction time or content area support for their ELLs, and 4 additional schools said they were providing sufficient instruction in language arts but not appropriate content-area instruction. Eight schools (2 of the former schools and 6 additional schools) reported they were not able to provide their English language learners with academic intervention services (AIS). One other school, a middle school, said it was providing AIS to ELLs but, in order to do that, these students missed another class, such as art or music.

4. Instructional Materials

Of the 27 schools, 19 lacked sufficient basic instructional materials for their ELLs, some in several areas. Fifteen schools reported that regular and/or ESL classrooms lacked enough written materials that were appropriate for their ELL students: they lacked sufficient leveled texts for ESL instruction, grade-level appropriate texts for subjects like science and social studies pitched at reading levels that ELLs could use, and dictionaries. One school reported that students have to share books across 5 sections of an ESL class and cannot take them home to study. These schools reported that their libraries contained few or no reading materials in languages other than English. In 3 schools (all in small-city districts), staff reported spending up to \$1000 per year of their personal resources to purchase instructional materials for students.

Thirteen schools said they lacked sufficient technology to meet learning needs of their ELLs, including an adequate number of computers for assessment and instruction, and instructional software. Three schools said they were unable to provide their students the opportunity to use a language lab to work on their verbal language skills.

5. In-Service Training to Enhance Instructional and Support Services

The state requires that in each school serving English language learners, all personnel providing instruction or other services must receive in-service training in order to enhance their appreciation for pupils' native languages and cultures and their ability to provide appropriate instructional and support services. Only 3 of the 27 schools reported that they were able to comply with this requirement.

Sixteen schools said they lacked adequate resources to provide any formal or systematic professional development to their teachers or other staff about instruction and support for English language learners. Five schools said some amount of training on how to support ELLs was available from their district, or, in NYC, from their school-support network, but they lacked the resources to permit a significant number of staff to participate; and 2 schools said their ESL staff had sufficient expertise to provide such training but lacked the resources to provide its staff adequate time to participate.

6. Facilities

The majority of schools said their facilities were appropriate for meeting the needs of their ELLs. However, 10 schools reported they lacked sufficient space to provide instruction to English language learners. Of the 10, 3 schools said students had ESL class in makeshift spaces that were both too small and inappropriate for effective teaching and learning: in one, the back of the copier room; in another, a book storage room; and, in the third, a class of 15 first-grade English language learners occupied a small, inadequate room inside the library for lack of space elsewhere. In another school, ESL classes were conducted on one side of a shared room while RTI instruction was being provided to another group of students on the other side. In these spaces, schools reported, students were less comfortable and more easily distracted. Five schools said they were unable to provide a designated space for ELL instruction and instructional resources, and one school said it lacked a sufficient number of classrooms to create appropriately sized instructional groupings.

V. Class Size and Instructional Groupings

"Kids need more time on task to get key concepts. This means smaller class sizes for more 'teacher time."

— NYC middle school principal

Every school must have appropriate class sizes and instructional groupings at all grade levels and in all subject areas to meet the needs of all students. In the Campaign for Fiscal Equity case, the Court of Appeals indicated that classes in excess of the following sizes may lead to unsatisfactory results, especially for students at risk of not meeting state standards: kindergarten-grade 3: 20; grades 4-6: 21-23; and middle and high school: 21-23.

Only 3 schools reported that all of their class sizes were in line with the court's specifications and adequate to meet their students' needs. Thirty of the 33 schools reported that their class sizes were too large for effective instruction of their high needs students. In these schools, some or all classes were larger than the sizes the court defined as appropriate. In NYC, Rochester, and one of the small-city school districts, schools reported class sizes that were consistently and considerably larger than the court's numbers. All of the NYC middle and high schools in the sample reported class sizes of 30 or over. In one high school, for example, nearly all classes are at the contractual maximum of 34 students; and smallest classes are 30. In these 30 schools, principals' assessments of the class sizes that would be appropriate for their high-needs student populations were largely similar to the court's specifications: 19 of the 30 said that class sizes of 20-23 would be appropriate, and 4 said that class sizes should be fewer than 20. One principal said that inclusion classes that include students with disabilities should be no larger than 16. In the 3 districts with particularly large class sizes, 7 principals said that class sizes ranging from 24-28 would be adequate.

A number of educators discussed other factors that should be considered in the determination of appropriate class sizes. One principal said that classrooms headed by less-experienced teachers should have smaller class sizes; another said that class sizes should relate to the number of struggling students; and a third said that student mobility was a factor and that classes with new students needed to be smaller than classes where all of the students had been in the school the year before.

VI. Instrumentalities of Learning

"English textbooks are over 30 years old and not aligned with Common Core Standards. Staff have been ...
furiously making copies from 6 [free] 'sample' textbooks ... to create [required] materials."

— Small city high school department chair

The state requires that all schools be equipped with sufficient and up-to-date instrumentalities of learning and be able to provide all of their students with appropriate instructional materials, including books, supplies, libraries, educational technology and properly appointed laboratories.

A. Books

Overall, 25 out of 33 schools were unable to meet requirements for sufficient up-to-date books for class-room use, some in more than one subject area. Of the 25, 11 lacked a sufficient number of textbooks in one or more subjects to provide all students with their own copy during class; 15 lacked adequate resources to provide students appropriate leveled reading material through classroom libraries; and 9 indicated that their textbooks were outdated. (In one school, social studies books were more than 12 years old.) Though not all schools had yet undertaken the update, 5 schools (4 middle schools and one high school) lacked adequate resources to purchase textbooks aligned with the Common Core in math and English language arts.

Of the 33 schools, 21 lacked sufficient resources to allow students to take textbooks home in order to review material covered during class, to complete homework assignments, or to study for a test. At many schools, teachers had only a single classroom set used by all students taking the course; other schools lacked resources to replace lost or stolen books. In lieu of adequate textbooks, one high school reported that it tried providing access to a textbook online, but some students lacked consistent internet access at home and could not access the material. Many teachers photocopy homework assignments from a textbook or workbook or allow students to have some (but not sufficient) materials to use at home.

B. A Sufficient and Up-to-Date Library Media Center

Overall, 22 out of 33 schools lacked adequate resources to maintain a sufficient and up-to-date library media center for their students. Of these, 21 reported that they were unable to provide students with an appropriate collection of up-to-date books and magazines. Eight schools reported that they lacked an adequate number of computers for their library media centers, leaving many students without access to research databases and other resources for online research, or computers on which to type assigned papers.

C. Sufficient and Up-to-Date Instructional Technology

Of the 33 study schools, 23 lacked adequate resources to provide sufficient and up-to-date instructional technology. Twenty-two of those schools reported that a lack of basic and current computer hardware impeded teaching and learning; over half (12) lacked adequate mobile computing devices such as laptops that could be used by students during classroom instruction. One high school had a single computer lab with fewer than 25 computers for over 2,500 students. Twelve schools lacked a sufficient number of interactive whiteboards and projectors to engage students in instructional activities in all subject areas as needed. And 5 schools—3 out of 5 in New York City—lacked reliable internet access for students to conduct research or for teachers looking to incorporate online resources into their lessons. All of these schools reported that the lack of sufficient resources to maintain and repair existing technology and replace worn out or obsolete software, hardware, or necessary accessories (such as ink cartridges) rendered much of the instructional technology they had functionally unusable.

Beyond inadequacies of instructional materials used directly for teaching and learning, 12 schools lacked a sufficient number of functioning printers to allow them to print instructional materials or progress reports. Thirteen schools could not afford to purchase a sufficient number of copiers or copy paper to prevent major delays; other schools reported that copy machines were old and frequently broke down or that they were unable to print necessary materials for lack of sufficient paper or toner cartridges.

D. Sufficient Basic Classroom Supplies Such As Chalk, Paper, Pencils, and Markers

Of the 33 schools, 21 could not afford to purchase adequate basic classroom supplies. Teachers and administrators at 15 of those schools spent anywhere from \$100 a year to \$2,000 a year of their own money, with most falling within the \$200-\$500 range, to purchase basic supplies that their schools could not afford. Many schools relied on parents to provide school supplies, though they acknowledged that this was a financial strain for many families.

E. Sufficient, Up-to-Date Subject-Area-Specific Materials and Equipment

Of the 33 study schools, 23 lacked supplies necessary for teaching and learning in particular subject areas. Fourteen lacked appropriate equipment and materials to instruct students in science. Seven of those schools had out-of-date laboratories that lacked sufficient sinks with running water, appropriate devices for measuring and weighing, microscopes, and mandated laboratory shower stations to use in case of accidents with chemicals, among other items. One high school had resorted to providing students pre-packaged specimen slides to use with microscopes because it could not afford to purchase the materials that would give students the authentic learning experience of preparing their own slides. Another high school lacked up-to-date equipment needed to carry out basic chemistry experiments.

Sixteen schools lacked sufficient calculators, compasses, protractors, and other math tools. Students at 15 of those 16 schools were not allowed to take these items home because their schools could not afford to replace them should some students lose them. Of those 15 schools where students can use the tools only on school grounds, 3 stated that the school-only policy inhibits them from assigning math homework that they would ordinarily require if students had access to the necessary math tools at home. One school acknowledged that it did assign math homework requiring graphing calculators, although students were not allowed to take them home—and students who could not afford to buy their own were therefore at a disadvantage.

Six schools—2 elementary schools, 2 middle-grade schools, and 2 high schools—lacked up-to-date maps to provide appropriate instruction in geography and history. One school can replace the large world map it uses for its global history classes roughly once every 4 years—too infrequently to keep up with a rapidly changing world; another would use web-based maps if the school was able to provide internet access in the classrooms used for social studies.

Four schools—2 elementary schools and 2 middle schools—lacked sufficient basic equipment in good repair to provide physical education instruction. Of the 4 schools, 2 in one district were unable to replace balls and fitness equipment when they wear out or break. A third school had little more than a few balls, cones, and jump ropes for its entire physical education program. And the fourth school could not afford to replace a large amount of physical education equipment after it was stolen.

Nine schools lacked basic art supplies such as paint, clay, easels, and smocks. One elementary school depleted its funding for art supplies in order to purchase additional copy paper. One middle school reported that its art teacher had resorted to demonstrating art projects for lack of sufficient materials for the students to make the projects themselves.

At 2 schools in different districts, students whose families could not afford to rent or purchase an instrument could not participate in band because the school lacked resources to provide enough instruments to all students who wanted to play one.

F. Sufficient Classroom Furniture and Equipment Such As Desks and Chairs

Nine of the 33 schools lacked sufficient basic classroom furniture that was in good repair and appropriately sized for their students. Of those 8 schools, 5 could not afford to replace broken chairs, desks, bleachers, and/or lockers. One school reported that its custodian occasionally duct-taped broken desks because the school did not have the resources to replace them. One middle school had elementary-school-sized desks that were uncomfortably small for most of its students, and one elementary school lacked sufficiently small chairs for its pre-kindergarten classes. Finally, 2 schools reported that not all classes had sufficient class-room furniture to accommodate all of their students, requiring some students to sit in folding chairs while their classmates sat at desks.

VII. Safe and Orderly Environment

The state requires that all schools have sufficient numbers of disciplinary and safety personnel and student support personnel to ensure a safe and orderly environment. Those personnel must be able to provide proper training for school personnel and appropriate prevention and intervention strategies such as nonviolent-conflict-resolution training programs; peer mediation programs and youth courts; and extended day and other school safety programs for the school community. In addition, schools must ensure safety on school buses.

As described in the sections above, overwhelmingly the high-needs schools in our sample lacked adequate resources to provide sufficient staffing levels in these crucial areas: 33 schools lacked adequate resources for sufficient numbers of disciplinary and safety personnel, and 32 for student support personnel.

A. Proper Training for School Personnel

Insufficient numbers of personnel to maintain a safe, orderly environment for learning were not the only barriers to safety. Schools' ability to ensure the individual and collective effectiveness of staff that they *did* have was undermined by the inadequacy of resources at their disposal to provide sufficient time and appropriate opportunities for professional development and collaboration around student discipline and school safety, including prevention and intervention strategies. Overall, 24 out of 33 study schools reported they had insufficient resources to satisfy the requirement that they properly train and support staff members in creating and sustaining a safe and orderly learning environment for their students.

Schools stressed that there was a huge gap between the amount of professional development and meeting time to address safety, social-emotional, and disciplinary issues and to implement conflict-resolution strategies. Without the time to discuss safety issues thoroughly and to plan preventatively, schools found themselves continually jumping from one crisis to the next.

One major barrier to providing safety- and discipline-related common planning time and appropriate training was understaffing, in this area and beyond, leaving no staffing "cushion" that administrators could tap in order to free up other staff for safety-related meetings during the school day. In addition, schools lacked adequate funding to hire substitute teachers to cover for staff members who would need to attend those meetings. Some schools would have organized these meetings in the afternoon, but they lacked funds to pay teachers for the additional time.

One middle-school educator said that much time is wasted by addressing disciplinary issues piecemeal instead of strategically during dedicated meeting times. An additional barrier was competing priorities for the use of limited staff meeting time. One school could only schedule one 45-minute faculty meeting a month; rarely did its staff have time to discuss and plan for safety and disciplinary issues once they had worked their way through instructional and administrative items that required extensive discussion. Another middle school was able to schedule only monthly school safety meetings, but needs many more. For example, a student in a gang was shot and the school lacked adequate time to collectively consider the implications for the entire school community, to provide appropriate professional development around gang violence, to coordinate interventions with the district's "gang unit," and to organize student assemblies with the local police department.

A middle school facing pervasive problems with bullying reported that it had no resources to provide district-required school-wide training for teachers on bullying prevention. As a result, discipline for bullying was meted out haphazardly, if at all, and students continued to harass and intimidate one another. Similarly, a high school that could only afford to carve 15-20 minutes out of biweekly faculty meetings to address safety issues lacked the time and resources to follow new anti-bullying legislation rules that require schools to document in detail each bullying incident, increasing its exposure to potential lawsuits from parents and others should a child get hurt.

Last year, another high school that had adopted a "restorative justice" system of addressing disciplinary infractions persuaded its teachers to "volunteer" to attend several days of restorative justice training over the summer because the school could not afford to pay them for their time; some teachers opted out. To have trained all teachers at the same time, the school would have needed sufficient funding to cover the cost of a "Saturday academy" for its staff, or, if the training were scheduled during the regular school day, for substitute teachers to have released participating teachers from their classrooms.

B. Prevention and Intervention Strategies to Promote a Safe and Supportive Climate

A large majority of the schools in our study, 21 out of 33, lacked adequate resources to provide their students and staff much, if any, training on prevention and intervention strategies to address safety and disciplinary issues.

Of the 11 study schools serving the elementary grades, 10 lacked adequate resources in this area. Four-fifths of schools (10 out of 12) serving the middle grades reported that they were unable to provide these supports. High schools did not fare much better: three-fourths of high schools (9 out of 12) lacked basic resources to provide the required training and guidance to their staff and students. In some cases, schools once had adequate staffing, either school-based personnel or specialists from outside, to satisfy this requirement, while others have never been able to meet the needs of their school communities in this area.

Three schools reported that they have attempted to implement positive behavioral intervention systems (PBIS) but lack adequate resources for their PBIS committees to meet and plan, or cannot afford to purchase incentives to reward students for good behavior. Other schools have never had sufficient funds to initiate anti-bullying programs, many of which require several thousand dollars for introductory training and considerable staff planning time and ongoing professional development to fully realize program benefits. For example, schools cannot afford to hire for student assemblies speakers with expertise in this area who could help students better understand the root causes of interpersonal conflict as well as constructive ways to manage it. Interviewees also said they needed materials and/or additional staff to provide consistent character-education classes or programs.

Principals and other school staff noted that afterschool athletic teams and student clubs, though not exclusively focused on conflict resolution and violence prevention, have a similar deterrent effect. These opportunities help develop positive and supportive relationships among students and between students and the staff who coordinate those programs, relationships that help promote safety and minimize negative behavior. Interviewees stressed that investing in preventative programs and learning experiences would allow schools to transition from punitive disciplinary systems to behavioral-learning learning approaches that equip students with problem solving, conflict resolution, and enhanced social skills.

The same number of schools, 21 out of 33, were unable to provide sufficient opportunities to involve students' families and other community members in helping to build safe and supportive school environments, such as parent workshops and school fairs. Of those schools unable to provide an appropriate level of support to promote a safe and supportive school climate, 12 specifically mentioned that their ability to promote safety and positive behavior hinged, in part, on parent and community support and involvement.

C. Safe Transportation

Transportation-related threats to school safety and order included both the lack of adequate afterschool transportation for students who otherwise faced threats when they walked home and a lack of appropriate supervision on buses to and from school. Of the 33 schools, 25 reported that they lacked adequate resources to ensure all students safe transportation to and from school.

A total of 13 schools reported not having enough staff to ride on school buses and help prevent negative or dangerous student behavior, including bullying, offensive language, and sexual activity. In some schools,

as many as 60 students were crowded into buses in spite of the larger sizes of many students these days, intensifying the need for bus supervision. The remedy, schools suggested, is to place at least one properly trained bus monitor on each bus, an expense that districts cannot afford.

Across the grade levels, 13 schools reported that they lack adequate transportation staffing and/or vehicles to bus students home following afterschool activities, academic and otherwise. As a result, many students and their families declined to participate in programs that would have provided those students with additional academic supports and kept them engaged in learning, and motivated to behave well.

VIII. Adequate and Accessible Facilities

"I might get better teacher retention, if [teachers] were honored with their own workspace.

[The teaching and learning conditions] blew my mind coming to the city."

— NYC high school principal

A. A Structurally Safe, Adequately Maintained School Building or Buildings

Due to resource inadequacies, 28 schools said they could not provide students with structurally safe, adequately maintained school buildings. While some schools reported dangerous conditions, no school was said to be structurally unsafe. Two schools were, however, using a temporary facility on a permanent basis.

Fifteen schools said they had lost custodial personnel, with schools reporting losses of up to 50% of their maintenance crew. To avoid losing a cleaner, one school had used instructional funds to pay a custodial salary, and another had given up needed supplies.

As a result of the loss of custodial personnel, 5 schools reported that routine cleaning was now done every other day instead of daily. Top-to-bottom cleanings had been reduced from several times a year to once a year. Schools reported that graffiti was not removed and that classrooms, hallways, and stairways were not thoroughly cleaned.

Four schools reported that bathrooms were now cleaned only at night and were no longer sufficiently clean and hygienic for student or public use throughout the day as a result. Emergency cleanups (bathroom floods, vomit, etc.) were not done on a timely basis or, if they were, routine cleaning was sacrificed.

Four schools reported that they lacked staff to clean the cafeteria before its next use. In one school, the principal, assistant principal, and parent volunteers cleaned the cafeteria after lunch every day. Another school was paying students for cleaning. One co-located NYC school said that, for lack of adequate custodial staff, it had to use per session funds, normally used to pay for extra instructional time or professional development, to pay school personnel to move furniture with each co-location rearrangement.

Eight schools reported they were infested with mice; 7 schools reported they were infested with cockroaches or other insects; 6 schools said they had a mold problem (including 2 schools with rooms quarantined because of mold).

Seven schools reported that, as a result of inadequate resources for maintenance, part of their school could not be used. One school reported that 4 classrooms were closed because of leaks; 3 schools re-

ported bathrooms closed because of a lack of funds for repairs; and one school reported that a room was off limits because of a wall that was caving in.

A number of schools also reported potentially dangerous conditions resulting from a lack of adequate maintenance: one school said its fire alarm box had been broken for 2 years; another had a broken step on the main staircase; in a third school, the fire exit signs and handicap access door handles were missing; and in 5 schools, cafeteria tables were in disrepair, with chipped and sharp edges.

Because of a lack of resources, schools reported that large repair projects had been postponed, including boiler replacement (2 schools), window replacement, septic tank replacement, repairing parking-lot potholes, exterior repairs (3 schools), repainting (2 schools), repairing bannisters, and the replacement of school doors that no longer locked. Smaller repair projects, like broken windows and electrical problems, were completed only after major delays.

Serious roof and/or plumbing leaks were reported in 15 schools, with water seeping or dripping into hall-ways, stairways, classrooms, lockers, computers, cafeterias, and auditoriums. Four schools reported that parts of their ceiling were falling, and one school had a very large hole in the ceiling of a public area. One co-located school had to close off staircases when it rained, creating overcrowding and turf issues.

Nine schools reported constricted hallways during class changes because of overcrowding and, in some cases, facilities that were meant for younger and smaller children or not built as schools as all. This condition, they said, led to altercations among students, particularly when schools lacked sufficient of adult monitors.

A number of schools worried about the effects of the inadequacies of their facilities not only on learning and health, but also on school pride and teachers and students' self-esteem.

B. Adequate Levels of Illumination for the Tasks Being Performed

Six schools (5 of them in NYC) reported having spaces with inadequate lighting levels. Two of them said they lacked adequate resources to replace burned-out overhead lights on a timely basis. Four schools reported having instructional spaces that lacked sufficient lighting, including 3 schools that were using converted closets for small-group instruction (see below).

C. Sufficient Controlled Heating and Ventilation

Twenty-four schools reported that they lacked sufficient heating and cooling to ensure suitable conditions for teaching and learning throughout the year. Five schools said they lacked adequate heating on cold days and that on some occasions students had to wear their coats in classrooms.

Many more schools (23) grappled with overheated classrooms during May, June, and September. Eight schools reported that they had no air conditioning (AC) at all; 13 schools lacked AC in most classrooms (including 6 that had AC only in classrooms where it was required by a student's IEP or 504 (medical) needs); and 2 schools said most but not all of their classrooms had AC.²⁰ As a result of the lack of adequate air conditioning, during the hot months, students and teachers were distracted, irritated, and drowsy, and

²⁰ One co-located NYC reported that it had invested in AC units for all of its classrooms one year, only to have some of those classrooms given to another school the next year.

"classrooms smell like a locker room." Some schools also lacked AC in the gym and auditorium, creating difficult conditions for Regents exams, concerts, assemblies, and graduation activities.

Five schools said that in the past year they had to move students out of their classrooms to another area of school because temperatures were too hot or too cold.

D. Sufficient Space for a Suitable Number of Classrooms of Appropriate Size

Eighteen schools reported they lacked sufficient space for appropriate class sizes and instructional groupings. Of these, 14 lacked sufficient space to reduce class sizes to appropriate levels. For lack of space, one high school abandoned any attempt to impose caps on of the number of students in its classes. Ten schools said their classrooms lacked adequate square footage for their current class sizes; and in some high school classrooms, students were sitting almost literally knee to knee.

Three schools said they lacked a sufficient number of classrooms to teach a full curriculum (one overcrowded high school was forced to limit the number of electives and AIS classes it could offer because of a lack of space; a co-located NYC school used the principal's office as classroom space, and another co-located NYC middle school said that the lack of space was one of the reasons it could not provide art, music, or a required language class). Four schools had converted closets and storage spaces into classrooms for ESL, special education, and AIS classes, and 5 additional schools said they lacked adequate space to provide academic supports through small-group activities during the school day.

E. Adequate Specialized Spaces for Libraries, Laboratories, Auditoriums, Gymnasiums, Playgrounds, Art Rooms, Etc.

Only 8 schools reported adequate facilities in all of these areas. The 25 schools that were deficient in this area included all 12 NYC schools.

Of the 25 schools, 5 reported that they lacked sufficient library space: 3 schools had no library; 2 schools had a library facility that was too small for the current number of students in the school; and 4 co-located NYC schools lacked adequate access to a shared library.

Fifteen of the 25 schools reported they lacked sufficient science labs: 7 schools lacked any science room or lab; 8 schools lacked enough science labs to accommodate the current number of students in their schools (e.g., one school reported that it had only one lab per 700 students and another reported one lab per 800 students).

Eight schools said they lacked sufficient auditorium facilities: 2 schools have no auditoriums and must use the cafeteria for assemblies, plays and other such activities; 3 schools lacked adequate space in their auditorium for the number of students they enrolled (2 schools had to hold every event twice). One school reported that it used its stage for storage because of a lack of adequate storage space. In addition, 2 colocated NYC schools lack adequate access to the shared auditorium, and 2 co-located schools reported that the auditorium had broken seats and nonfunctional equipment and was not maintained by any of the schools in the building.

Thirteen schools reported they lacked sufficient and appropriate gymnasium facilities. Four of them said they had no gymnasium at all; in 3 schools, including one that had to provide adaptive physical education to students in the lobby there was insufficient gym space to accommodate all students. In NYC, 6 co-located

schools said they lacked adequate access to a shared gym, and 2 co-located schools that served middle school students said that their gyms were scaled for early childhood or elementary school students. In one school, the locker room was used as a storage room for lack of adequate storage space elsewhere.

Five schools reported a lack of sufficient playground space or athletic fields, and one co-located NYC school reported that it had inadequate access to a shared yard.

Seven schools said they lacked a music room; 7 lacked an art room. Three schools said that their art and/or music rooms could not accommodate the current number of students assigned to each classroom.

Four schools said their cafeteria was too small to accommodate the current number of students and reported having to run multiple lunch shifts, with some students eating lunch as early as 10:30 a.m. Four schools said their schools no longer had cooking kitchens. Two schools lacked enough cafeteria tables to accommodate all students in a single lunch period. One co-located NYC school lacked adequate access to the shared cafeteria (the entire school had only 45 minutes to use both the cafeteria and the yard).

F. Appropriate Electrical Wiring to Support Instructional Technology

Twenty-four of 33 schools reported that they lacked the electrical infrastructure needed to support instructional technology. In 8 schools, the current wiring could not accommodate the electricity needed to power existing technology, and 9 schools said their use of technology was hampered by the lack of an adequate number of electrical outlets in their classrooms. Eight schools had no wireless network, and 6 schools had no or inadequate internet access. One school reported using portable generators to power classroom technology, though this violated the fire code.

G. Sufficient Bathrooms, with an Adequate Number of Proper Fixtures, and a Safe and Potable Water Supply

Of the 33 schools, 17 schools reported that they lacked a sufficient number of appropriate bathrooms for students, staff, or both. Five reported that they lacked enough bathrooms for their students and said that having too few student bathrooms resulted in lost instructional time, increased student conflicts, and greater wear and tear on the facilities. Three schools said that some of their student bathrooms are permanently closed because there is no funding for necessary repairs; as a result, in one school, 2,000 girls had only 10 bathroom stalls available. Four other schools reported that, because of old plumbing and overuse, some their bathrooms were routinely out of order. One school had no stall doors in some of the boys' bathrooms but lacked funds to replace them. Four schools, all in NYC, said that their student bathrooms could not be properly cleaned and constantly smelled of urine.

Eleven schools reported that they lacked sufficient bathrooms for adults. For example, at one school, 45 staff members and all adult visitors, including parents, shared 2 toilets; one school had only 6 toilets for nearly 110 staffers and all adult visitors, and another school had 3 toilets for 80 staff and all visitors. Several of these schools reported having only unisex bathrooms and said that teachers commonly had to wait in line to use a bathroom. One school had one multi-stall unisex bathroom for all staff members and visitors.

For lack of adequate space elsewhere, other schools said they had converted a bathroom into an office, a storage room, and an in-school suspension room.

Five schools reported they lacked a sufficient number of working drinking fountains.

H. Sufficient Ramps, Bathrooms, Elevators and Other Accommodations Sufficient to Meet the Accessibility Needs of Students and Staff with Disabilities

As stated above, 16 of the 33 schools reported that they were not fully accessible to mobility-impaired students or staff. In 8 of these schools, students with disabilities lacked access to facilities like the auditorium, playground, swimming pool, computer room, or bathrooms in specific parts of the school. Eight buildings were not accessible at all, lacking ramps, elevators, and accessible classrooms and bathrooms.

Conclusion

New York's highest court has ruled definitively that the state has a constitutional obligation to provide every public school student the opportunity for a sound basic education. The Regents have defined that education as one that will allow each student to meet a challenging set of academic standards and that will prepare every high school graduate to be "college and career ready."

The detailed findings set forth in this report are evidence that, more than 5 years after the final court ruling in CFE, the state is failing to provide its students a meaningful opportunity for a sound basic education on a massive scale. Thousands of students in our sample of high-needs schools throughout the state—and almost certainly hundreds of thousands of students in schools like them—are being taught by inadequately trained and ineffective teachers, are not receiving minimal instructional time in basic subjects, lack access to numerous state-mandated courses, go without necessary books and technology, endure poorly maintained and even unsafe school environments, and fail to receive the extra services and supports that the state statutes and regulations acknowledge that many of them need in order to meet the state's learning standards.

Schools are not willfully ignoring state mandates. They very simply lack the basic human and material resources necessary to meet them. Most of the schools we studied spent considerable time and great efforts determining how to make the most of their inadequate resources and to stretch them to cover as many students and requirements as they could. A number of schools were providing some, though not sufficient, services or meeting bare minimums only because teachers were working after -school and on weekends without compensation, and administrators took on multiple jobs, in a manner that cannot be sustained. Still, as a result of funding constraints, many schools faced Solomonic choices every day. Should they provide a social studies class that students need to graduate or replace the substitute who teaches science to their students with disabilities with a permanent teacher? Should they buy copy paper or art supplies? Which third of their students who are below grade level should get small-group support to help boost their performance in math?

Another insight we gained from this study is that requirements matter. Although often breached, the state's minimum requirements are important protections for students, in many cases students' only protections. These requirements create a floor that most schools try diligently to maintain. Unfortunately, in too many cases, especially in NYC, the minimum the school is required to provide has become the maximum that students can expect.

Since the "state" is constitutionally responsible for this tragic situation, the governor, the legislature, and the Regents need to respond promptly and aggressively to meet the students' critical educational needs. The governor and the legislature must fairly confront the blatant violations of constitutional rights they have created by cutting educational appropriations in recent years without undertaking any analyses of what impact these across-the-board budget cuts would have on thousands of students at the actual school level. The state authorities have respected their constitutional obligation to balance the state budget, but, at the same time, they have grossly neglected their equally obligatory constitutional duty to ensure that all students are provided the opportunity for a sound basic education.

Recommendations

Specifically, in order to bring the state into constitutional compliance, the following actions need to be taken:

1. The Regents, the state commissioner of education, and the state education department need to

- Conduct further research to confirm the findings of this study and to determine the extent to which the violations discovered here apply to other high-need schools—and to all schools—throughout the state.
- Amplify their regulations to ensure that the "minimums" that they articulate reflect adequate and sufficient levels of constitutionally mandated services. In doing so, they need to avoid writing special waivers and exceptions to statewide regulations that lower standards only for New York City, strictly because of financial considerations. The state education department also needs to enforce these regulations, and the legislature needs to provide them the means to do so.
- Add a requirement that a resource-adequacy analysis be included in all school report cards and progress reports.

2. The governor needs to

- Act assiduously to root out inefficiency and promote more cost effective methods for providing educational services.
- Include a "sound basic education impact statement" in the annual executive budget.

3. The legislature needs to

- Follow the Court of Appeals' directive to "determine the cost of providing a sound basic education" and then "ensuring that every school [will] have the resources necessary for providing the opportunity for a sound basic education"²¹ by
 - developing an up-to-date cost-study methodology based on actual costs of providing constitutionally mandated services in a cost-effective manner that properly weights student needs and concentrationof-poverty factors;
 - · conducting a current cost study to determine adequate funding levels for public education;
 - · creating fair funding formulas that ensure that "state aid should increase where need is high and local ability to pay is low"²² and that all schools will receive the resources they need to provide all students the opportunity for a sound basic education—without arbitrary caps and hold-harmless clauses.

In short, the state authorities need to live up to their constitutional responsibilities and take stock of how, under current conditions, New York State's public schools can realistically provide all of their students a meaningful opportunity to meet state standards and then ensure that they have sufficient funding to do so. The Regents, the governor, and the legislature need to come up with a plan that, as the United States Supreme Court wrote in an analogous context involving equal educational opportunity, "promises realistically to work, and promises realistically to work now."²³

²¹ CFE v. State of New York, 100 N.Y. 2d 893, 930 (2003).

²² Id at 929.

²³ Green v. County Sch. Bd., 391 U.S. 430, 439 (1968)

Appendix A. Summary of Recent Surveys of Resource Deficiences in New York State

I. Qualified Teachers, Principals, and Other Personnel

A November 2012 survey of superintendents by the New York State Council of School Superintendents indicated that, for the 2012-13 school year, districts across the state reduced their workforce by an average of 3.9%, on top of the 4.9% reduction they reported in 2011-12. Districts reduced classroom teachers in particular by an average of 3.6%. For at least one year within the past 3 years, 87% of districts have reported a reduction in teaching staff.

Many schools have also experienced a loss in administrators. In the 2012-13 year, 22% of districts reported reducing central office administration positions and 18% reduced building-level administrative positions. Districts reduced their administrative positions by an average of 5.2%.

New York State Council of School Superintendents (2012). Can't Get There from Here: Budgeting Challenges Call for New Directions in State Policy to Help Schools Raise Student Achievement. http://www.nyscoss.org/img/news/news_m4u1j66zda.pdf

According to an Alliance for Quality Education report, there was a statewide elimination of 11,000 teachers, librarians, guidance counselors, and other school positions in the 2011 year.

Alliance for Quality Education (2011). *Back to Inequality: How Students in Poor School Districts Are Paying the Price for the State Budget.* http://www.aqeny.org/ny/wp-content/uploads/2011/11/11.15.11-Back-to-Inequality-Release1.pdf

 Because of budget cuts between 2009 and 2012 in Yonkers, the district now has only 10 psychologists for almost 26,000 students, and high schools have reduced the number of guidance counselors to two counselors per building, resulting in a 650 to 1 ratio.

Following 2011-12 budget cuts, the Yonkers Public Schools eliminated librarians in the elementary schools, affecting 25,000 students and limiting library access for elementary and middle schools to one day a week and for high schools to only half a day per week.

Yonkers Public Schools (2012). *Impact of Cuts to Yonkers Public Schools.* http://www.yonkerspublicschools.org/docs/budget/YPS-Two-Year-Impact-of-Cuts.pdf

• The NYC Department of Education's Annual Arts in School Report 2010-2011 indicated that 54% of elementary schools in NYC met the arts requirements, an increase from 51% the previous year. However, 46% of elementary schools do not provide students with required arts education.

New York City Department of Education (2011). *Annual Arts in Schools Report, 2010-2011.* http://www.scribd.com/doc/75596137/2010-11-Annual-Arts-in-Schools-Report

II. Suitable, Up-to-Date Curricula

A 2011 survey of New York City teachers indicated that 20% of 458 elementary schools lost their art
and music classes. Out of 140 middle schools, 23% eliminated art and music, and for the 186 high
schools, 28% lost their art and music courses. The survey also found that over a third of New York City
high schools cut advanced placement classes, electives, and gym. It also showed that 42% of elementary
schools, 59% of middle schools, and 51% of high schools made cuts to their extracurricular programs.

United Federation of Teachers (2011). *UFT Survey*. http://www.uft.org/press-releases/one-million-city-students-schools-hit-budget-cuts

The Center for Arts Education analyzed data collected by the New York City Department of Education and found significant declines in the budgets for arts education in the 2010-11 school year. It found that approximately 23% of all New York City public schools (over 350 schools) had no *full-time* or *part-time* licensed arts teacher on staff. "With 17 and 16 percent of middle and high schools, respectively, lacking even one certified arts teacher, a question arises as to how those schools are providing the necessary instruction for their students to receive the required instruction in the arts," it states. Additionally, 30% of elementary schools lacked a certified arts teacher.

The Center for Arts Education (2011, June). Accelerating Arts Education Funding Cuts and Loss of Arts Teachers Paint Grim Picture for City Schools. http://www.cae-nyc.org/sites/default/files/docs/Research-Brief-Accelerating-Arts-Education-Cuts-June-2011.pdf

• A 2011 Annual Arts in Schools report from the New York City Department of Education found that of responding middle schools, 16% of 8th graders who graduated had not received their required 2 semester of arts instruction. Only 29% of responding high schools reported offering a 3-year visual arts sequence; 20% offered a music sequence; and 10% or fewer offered sequences in dance, theater, or film. Among responding schools, 28% reported having no appropriately equipped classroom or other facility for visual arts, and even fewer had one for the other arts disciplines. Out of a more than dozen options, 69% of New York City school administrators identified "budgeting for the arts" as one of the top three biggest challenges to providing sequential arts education in their schools (44% listed it as the number one challenge).

NYC Department of Education (2011). *Annual Arts in Schools Report: 2010-2011*. http://schools.nyc.gov/offices/teachlearn/arts/ArtsCount/ArtsReport/2010-11%20Annual%20 Arts%20in%20Schools%20Report.pdf

Looking at 31 randomly selected schools in the fall of 2011, the City's Office of the Comptroller found
that none of them met the minimum requirements for physical education. The report suggested that one
of the factors preventing compliance with state standards was a lack of designated physical education
teachers and non-classroom space for physical education.

City of New York Office of Controller (2011, October). Audit Report on the Department of Education's Compliance with Physical Education Regulations in Elementary Schools. http://comptroller.nyc.gov/bureaus/audit/PDF FILES 2011/MD11 083A.pdf

 According to the Long Island Education Coalition's preliminary findings for its 2011-12 Budget Impact Survey, out of 101 Long Island districts, 30% of low wealth districts planned a significant reduction (10+%) in middle school athletics, and 19% planned to reduce high school athletics. Nearly 30% of low wealth districts in Long Island planned to reduce high school electives by a significant amount and almost 40% of low wealth school districts planned to significantly reduce opportunities for students to participate in BOCES career and technical education. About 17% of low wealth districts planned a "significant reduction" to advanced placement classes.

Ten Key Preliminary Findings from 2011-12 Budget Impact Survey. The Long Island Education Coalition. http://api.ning.com/files/C9RN2UFraVYs5II-knJgAQqVSC1PhlkvLDxI-WAgIZ5k-WtqSyTL4RnN1R6n-fHjB7RNn*SlwpBF4LHSvsF3vCbLRTcmPtCD6/9911LIECSurvey.pdf

According to a 2011 survey of 283 New York superintendents, 56% of the respondents, anticipating the effects of the budget reductions for the 2011-12 school year, expected the cuts would negatively affect instruction in English, math, science, and social studies, 39% expected reductions in art instruction, and 41% foresaw reductions in music instruction. Districts also feared that opportunities for physical activity would decrease, with 57% of districts predicting a negative impact on athletics. Guidance counseling and health services will likely downsize, as 56% reported cutting "other student services." Urban districts were particularly concerned about the effects of the budget on instruction. Out of the urban superintendents, 69% foresaw a negative impact on English, math, science, and social studies instructions. The survey showed that 63% also expected cuts to non-athletic extracurricular activities as a result of the 2011-12 budget, and half of the districts already reduced these activities at the beginning of in the 2011-12 school year. Forty-one percent of superintendents across the state expected that New York's 2011-12 budget will hurt advanced or enrichment classes. Fifty-nine percent of all superintendents, and 78% of urban superintendents, reported that the 2011-12 budget would negatively impact the school's ability to provide extra help for students who need it. At the beginning of the 2011-12 school year, 33% had already reduced extra help for students during the school year, and 36% reduced summer school. Across the state, 17% of districts cut advanced or honors classes and 17% decreased enrollment in career and technical programs for the 2011-12 school year. Twenty-two percent of districts reduced art classes and 24% reduced music classes. Almost half of New York state districts reduced sports programs.

New York State Council of School Superintendents (2011). At the Edge: A Survey of New York State Superintendents on Fiscal Matters. http://www.otlcampaign.org/sites/default/files/resources/AttheEdgeSurveyReportFINAL.pdf

• The second annual survey of New York Superintendents (which did not include responses from the Big Five or BOCES), found that for the 2012-13 school year 16% had reduced art classes and 20% reduced music classes. 41% of districts anticipated the 2012-13 budget decisions would have some or severe negative impact on core instruction in elementary grades, and 33% anticipated a negative impact in English, math, science, and social studies in the middle level grades. More than half of the superintendents said their district's financial condition is worse or significantly worse than a year ago.

New York State Council of School Superintendents (2012). Can't Get There From Here: Budgeting Challenges Call for New Directions in State Policy to Help Schools Raise Student Achievement. http://www.nyscoss.org/img/news/news_m4u1j66zda.pdf

According to an April 2012 survey conducted by New York State Association of School Business Officials and the New York State School Boards Association, budget plans for the 2012-2013 school year in 43.5% of school districts reduced elective courses. In addition, 40% of the planned budgets for the 403 school districts that responded to the survey reduced extracurricular activities and athletics for the 2012-13 school year.

New York State School Boards Association (2012). The New Reality for Schools: The First Budgets Under the Tax Cap. http://www.nyssba.org/clientuploads/nyssba_pdf/NYSSBA-NYSASBO-Budget-Report.pdf

 A 2011 report of the Alliance for Quality Education documents specific schools across the state and programs/services that they have cut. The programs that the 120 schools in the sample have cut include foreign language classes, music and art, BOCES programs and advanced placement classes, sports teams, field trips, summer school, and student clubs.

Alliance for Quality Education (2011). Across New York State: Examples of Cuts as a Result of State Budget Cuts. http://www.aqeny.org/ny/wp-content/uploads/2011/01/Across-New-York-State-Impact1.pdf

• A report published in collaboration with the Annenberg Institute at Brown University found that not all recent New York public school graduates met the guidelines for adequate academic coursework for incoming students, established by the City University of New York (CUNY). Approximately 7.5% of high school graduates did not complete four years of English, 7.5% did not take a year of performing/visual arts, and 15.5% did not have four years of social studies. Roughly 35% of graduates did not complete the recommended three years of foreign languages and 45% did not take three years of science. The most telling statistic for the gap in preparedness levels was for math classes -- a total of 81% of public school graduates did not have four years of math.

Garvey, J. (2009). Are New York City's Public Schools Preparing Students for Success in College? http://annenberginstitute.org/sites/default/files/product/200/files/Garvey_Report.pdf

III. An Expanded Platform of Services for "At-Risk" Students

• A survey conducted by the United Federation of Teachers in the fall of 2011 found that out of 876 New York City schools that responded, 56% of elementary schools reduced Academic Intervention Services (AIS), as did 30% of middle schools and 17% of high schools. The survey showed that approximately 60% of elementary schools, 63% of middle schools, and 60% of high schools in New York City reduced after school programs; 40% of elementary schools, 46% of middle schools and 38% of high schools reduced weekend programs; and 24% of elementary schools, 43% of middle schools, and 46% of high schools reduced tutoring programs.

United Federation of Teachers (2011). *UFT Survey*. http://www.uft.org/press-releases/one-million-city-students-schools-hit-budget-cuts

• The Bronx Charter School for the Arts surveyed 25 schools and according to the self-assessments regarding Response to Intervention (RTI) implementation, in 2011, only about 40% of respondents said they were fully addressing the "Tier I" five pillars of reading. Only 31% fully implemented the supplemental instruction time required during Tier 2. Some schools reported they had not implemented the extra instruction at all (4%). Only 42% of schools said that Tier 2 interventions are being provided as soon as a student's at risk status is determined. For Tier 3 interventions, more than half of schools reported that they have not fully implemented the interventions to match students' specific needs. Only 8% of schools offered supplemental instruction for at least an hour, five times a week, in addition to the core instruction.

Both professional development related to RTI as well as parent involvement were not yet fully implemented in many of the schools.

Bronx Charter School for the Arts (2009 and 2011). New York State Self-Assessment Tool for Rtl Readiness and Implementation. http://www.nysrti.org/docs/BRONX_CHARTER_Rtl_Self_Assessment_Results_2009_2011.pdf

A May 2012 report released by New York State School Boards Association found that 30% of 403 New York districts surveyed "made cuts in numerous areas, including transportation, to keep their budget proposals for the 2012-13 school year within the state's new property tax cap." The report found that 22.6% of districts reduced extra help for students in their proposed 2012-13 school budgets because of the property tax cap, and 16.9% reduced or eliminated summer school.

New York State School Boards Association (2012). The New Reality for Schools: The First Budgets Under the Tax Cap. http://www.nyssba.org/clientuploads/nyssba_pdf/NYSSBA-NYSASBO-Budget-Report.pdf

According to a 2011 survey of 283 New York superintendents, more than a third of districts experienced cuts
in pupil transportation and other services, such as guidance counseling, health and mental health services.

New York State Council of School Superintendents (2011). At the Edge: A Survey of New York State Superintendents on Fiscal Matters. http://www.otlcampaign.org/sites/default/files/resources/AttheEdgeSurveyReportFINAL.pdf

 According to the second annual survey of superintendents, released in 2012, 31% of districts in New York reduced summer school programs in 2012-13.

New York State Council of School Superintendents (2012). Can't Get There From Here: Budgeting Challenges Call for New Directions in State Policy to Help Schools Raise Student Achievement. http://www.nyscoss.org/img/news/news_m4u1j66zda.pdf

IV. Students with Extraordinary Needs

A. Students with Disabilities

 A report on the impact of budget cuts on students in school districts throughout the state found that the General Brown Central School District cut a special education resource room. The Thousand Islands Central School District reduced speech improvement services. Both the Niagara Wheatfield and Onondaga Central School Districts eliminated modified sports programs for students with disabilities.

Alliance for Quality Education (2011, January). Across New York State: Examples of Cuts as a Result of the State Budget Cuts. http://www.aqeny.org/ny/wp-content/uploads/2011/01/Across-New-York-State-Impact1.pdf

• A 2011 audit of New York City public schools found that during the 2009-10 school year, city schools failed to provide individual special needs services to more than a quarter of eligible children, and pro-

vided such services to only 34% of pre-school students who were legally entitled to them, with children in poorer neighborhoods being particularly neglected.

City of New York, Office of the Comptroller (2012, January 24). Audit Report On The Procurement Of Direct Student Services By The Department Of Education. FK10-147A. http://www.comptroller.nyc.gov/bureaus/audit/PDF_FILES_2012/FK10_147A.pdf

• A 2008 report by the New York City Public Advocate concluded that the number of school psychologists had declined during recent years of budgetary restrictions, despite the rising numbers of students needing special education services. During this same period, school psychologists were compelled to assume greater responsibilities beyond their primary role of providing clinical evaluations, such as clerical duties and classroom placements (which were previously conducted by educational evaluators, the numbers of which had also declined). As a result, students in these areas experienced greater waiting periods for being diagnosed as having special needs, which in turn led to a delay in the provision of necessary supplemental services.

Public Advocate for the City of New York (2008, November). Overworked, Underutilized: How the Department of Education's Reorganizations of Special Education Turned School Psychologists from Mental Health Professionals into Paper Pushers. www.uft.org/files/attachments/public-advocate-report-overworked-underutilized.pdf

B. English Language Learners

The New York City Department of Education's policy of closing large comprehensive high schools and
replacing them with smaller, themed schools often excludes English language Learners or fails to provide
appropriate ELL programs and language services for these students. As specialized language programs
have been phased out, ELLs received less support and fewer services, and they were sometimes encouraged to move out of general education and into GED classes.

Advocates for Children of New York (2009, June). *Empty Promises: A Case Study of Restructuring and the Exclusion of English Language Learners in Two Brooklyn High Schools.* http://www.advocatesforchildren.org/Empty%20Promises%20Report%20%206-16-09.pdf?pt=1

V. Class Size/Instructional Groupings

According to the New York City Department of Education, from 2010-11 to 2011-12, citywide average class size increased by 0.7%, a difference of 0.2 students per class. During that time, elementary schools increased by 3%, 23.7 to 24.4 average students/class. Middle schools increased by 0.8%, 26.8 to 27. High school sizes remained flat at 26.3. 667 schools increased by more than 2.4%.

New York City Department of Education (2012). *Updated Class Size Report*. http://schools.nyc.gov/NR/rdonlyres/FDCE097C-C477-48B0-9187-CEEF97BFF08A/0/20112012Updated-ClassSizeReportFINALwcorrectiononHSfy11page4.pdf

• Class Size Matters released a fact sheet based on the Department of Education's data for the 2011-12 school year. They calculated that 85% of all students in grades K-3 exceeded the 2011 Contracts for

Excellence goal of 20, 81% of all students in 4th-8th grade exceeded the goal of 23, and 71% of all students in high school exceeded the goal of 25.

Class Size Matters: F.A.Q.s about C4E Law. http://www.classsizematters.org/wp-content/up-loads/2012/09/FAQ-C4E-Final1.pdf

Based on survey responses from chapter leaders of 875 NYC schools in the fall 2011, the United Federation
of Teachers Union revealed that 74% of elementary schools had larger class sizes than the previous year.
 The report found that 61% of middle schools and 59% of high schools also saw larger class sizes that year.

United Federation of Teachers (November 2011). *UFT Survey.* http://www.uft.org/press-re-leases/one-million-city-students-schools-hit-budget-cuts

According to a 2012 report prepared by New York City Councilman Brad Lander (District 39), the number of elementary students in general education classes with 30 or more students has tripled since 2008 (from 9,756 students in 2008-09, to 31,079 students in 2011-12). In fourth grade, while 5.5% of students were in classrooms of this size in 2009, 13.8% were as of 2012.

Office of City Councilman Brad Lander 39th District (2012). Number of Elementary Students in Very Large Classes Has Skyrocketed Since 2008: A Review of the Impact of Budget Cuts and Teacher Attrition on Large Class sizes in New York City public schools. http://www.scribd.com/embeds/86761518/content

 According to a 2011 survey of 283 New York superintendents, 63% of districts surveyed increased class sizes for the 2011-12 school year; 47% had increased them the year prior.

New York State Council of School Superintendents (2011). At the Edge: A Survey of New York State Superintendents on Fiscal Matters. http://www.otlcampaign.org/sites/default/files/resources/AttheEdgeSurveyReportFINAL.pdf

• The second annual New York Superintendents Survey, reporting on the 2012-13 school year, showed that 59% of New York school districts surveyed (which did not include the Big Five) increased class sizes.

New York State Council of School Superintendents (2012). Can't Get There From Here: Budgeting Challenges Call for New Directions in State Policy to Help Schools Raise Student Achievement. http://www.nyscoss.org/img/news/news_m4u1j66zda.pdf

VI. Instrumentalities of Learning

 The New York State Council of Superintendents surveyed 283 superintendents across the state in 2011 and found that 47% of the districts said they "reduced or deferred purchases of computers and other instructional technology."

New York State Council of School Superintendents (2011, October). At the Edge: A Survey of New York State Superintendents on Fiscal Matters. http://www.otlcampaign.org/sites/default/files/resources/AttheEdgeSurveyReportFINAL.pdf

 The 2012 survey by New York State Council of Superintendents found that 31% of school districts in New York reduced or deferred purchases of instructional technology "at a time when technology is seen as a key to improving outcomes and reducing costs."

New York State Council of School Superintendents (2012, November). Can't Get There From Here: Budgeting Challenges Call for New Directions in State Policy to Help Schools Raise Student Achievement. http://www.nyscoss.org/img/news/news_m4u1j66zda.pdf

 Responding to a 2011 survey conducted by the United Federation of Teachers, more than a third of New York City teachers said they had fewer textbooks that year, and more than half of them had a reduction in other instructional supplies.

United Federation of Teachers (2011). *UFT Survey*. http://www.uft.org/press-releases/one-million-city-students-schools-hit-budget-cuts

• A 2012 poll conducted by SchoolBook asked parents how much their child's public education cost them, and the answers from around 400 readers across the five boroughs revealed a financial burden increasingly placed on families to make-up for a lack of instructional materials in schools. Many parents said they spend more than \$1,000 a year on school-related items, over a dozen spent more than \$5,000, and several spent more than \$10,000. Faced with ever-shrinking budgets, schools are asking parents to provide classroom supplies, including paper towels, hand sanitizers, pencils, rugs, and glue sticks. PTAs were also asked to cover expenses like repairing a copy machine and art supplies for classrooms.

Spencer, K. (2012, May 31). Parents Dig Deeper to Relieve Right Public School Budgets. Schoolbook, The New York Times. http://www.nytimes.com/schoolbook/2012/05/31/parents-dig-deeper-to-relieve-tight-public-school-budgets/

VIII. Adequate and Accessible Facilities

 According to the Council of School Supervisors and Administrators, co-locations have caused some schools to adopt "gymatoriums," or combined gymnasiums and auditoriums. Sharing these spaces significantly reduces the number of periods available for gym, and the time available for meals. Consequently, students often eat meals at inappropriate times. Furthermore, buildings that house charter schools and public schools widen the discrepancies between the two schools. Charter schools regularly have funding for afterschool programs while the public schools do not.

The Council of School Supervisors and Administrators (2012). New York City Council Hearing Committee on Education. http://www.csa-nyc.org/sites/default/files/City%20Council%20-%20Co-location%20testimony.pdf

• The Coalition for Education Justice in NYC examined the effects of co-locations on several schools and found that shared space resulted in the elimination of programs and services. For example, PS 188, which shares space with two schools, has given up afterschool programs, adult ESL classes, and its art room and has moved its physical and occupational therapy to unsuitable spaces. Additionally, PS 15 in Red Hook, Brooklyn, a sharing arrangement with a charter school has resulted in PS 15 has giving six full rooms and six half rooms, including academic classrooms, a computer room, a science lab, an occupational therapy room, a speech and language room, a professional development room, the special educa-

tion office, and a room used for individual and family counseling.

NYC Coalition for Educational Justice (2010). The Impact of Co-location on a Sample of Schools. http://www.nyccej.org/wp-content/uploads/2010/02/reality-check.pdf

• An audit by the NYC Comptroller found that none of the 31 elementary schools visited appeared to be in compliance with state requirements for physical education, and that the NYC DOE has no system in place for monitoring compliance. Two of the 31 schools visited did not have a designated physical education teacher and another two schools did not have a non-classroom designated area in the school for physical education, such as a gymnasium or multi-purpose room. In addition, one school did not have a designated PE teacher or a non-classroom designated area for PE. Some other schools that provide physical education only in a multi-purpose room may have difficulty providing the required physical education to their students because access to the room might be limited because of the other uses of the room.

Office of the New York City Comptroller (2011). Audit Report on the Department of Education's Compliance with the Physical Education Regulations in Elementary Schools. http://comptroller.nyc.gov/bureaus/audit/PDF FILES 2011/MD11 083A.pdf

• The NYC Independent Budget Office found that in Queens, 78% of students in large high schools in 2008–09 were in overcrowded buildings. By 2008–09, small school overcrowding decreased to 17% of students. Queens had the greatest number of overcrowded large and small schools in 2008–09. The Budget Office further found that small schools in the Bronx have experienced the largest increase in overcrowding of any borough. Small Bronx high schools saw overcrowding increase from 13% in 2004–05 to 24% in 2008–09. Five of the 10 most crowded small schools in 2008–09 were in the Bronx. Each was between 29% and 68% over capacity.

New York City Independent Budget Office (2010). *High School Overcrowding Persists, Especially in Large Schools*. http://www.ibo.nyc.ny.us/iboreports/overcrowdingaugust2010.pdf

Appendix B. Methodology

District and School Selection

For selection in the study, we sought districts from among the state's high-needs districts, as defined by high percentages of low-income students and/or very low district property wealth. Additionally, we sought geographical distribution around the state and representation from among the state's different district types (Big 5, small city, suburban, and rural). Within districts, we selected schools that served a large percentage of high needs students, as defined by free and reduced price lunch rates. We aimed to have about a third of the schools from NYC and two-thirds from the rest of the state, approximately mirroring the actual student population in the state.

Initial nominations for schools and districts for the study sample were provided by a variety of experts and key informants: in New York City by our project advisory board (see Appendix B) and by staff developers working in city schools, classroom teachers, school support networks, principals, community based organizations, elected officials, and a range of other community contacts; in the rest of the state by a statewide advisory committee comprising representatives of the New York State School Boards Association, the Statewide School Finance Consortium, and the New York State Council of School Superintendents. This committee provided technical assistance to allow our research team to identify districts of the appropriate district type (rural, suburban, small city, etc.) with schools serving primarily high-need student population that were geographically distributed around the state. Our research team made the final determination of the study districts and schools and kept their identities confidential.

After examining demographic data to confirm schools' suitability, we undertook initial interviews with superintendents and principals to determine their willingness to cooperate with an in-depth study. In districts with multiple schools, we reviewed publicly available school data to identify schools that met our criteria for high-need schools. Participating schools were selected on the basis of demographic data about the needs of the students, their willingness to participate, and geographic distribution.

The sample includes schools in 2 Big 5 school districts (New York City and Rochester), 2 small city districts, 2 suburban districts, and 2 rural districts. To protect the confidentiality of participating schools and personnel, we do not identify the small city, suburban, or rural districts because of the small number of schools in these districts. We can state, though, that the districts selected do represent most of the major regions of the state, from Long Island, New York City, and the Hudson Valley to Central New York, Western New York, the Southern Tier, and the North Country.

Recruitment

The recruitment process for the study began with a request for a confidential informational interview with a district superintendent or, in New York City, a school principal. In this interview, the research team described the study, conducted a broad-ranging interview about resource availability, and confirmed willingness to participate. Informed consent was obtained in advance of these interviews. After this initial interview, superintendents and principals either agreed to participate or declined, and we then solicited others on our selection list until we had the number and distribution of schools we wanted.

All participation was strictly voluntary, and all participants were thoroughly informed about the risks of participation and their rights as participants before they agreed to participate. The identities of all participants and of their schools are confidential in accordance with the requirements of the Teachers College Institutional Review Board.

Upon agreeing to participate in the study, superintendents or principals were asked for a list of personnel to participate in our resource inventory interviews based on their expertise and availability. The research team selected a sample of those recommended in order to protect the participants' identities. In all cases, administrators and other school personnel were separately interviewed.

Neither schools nor school faculty received any direct benefits from participating in this study.

Sample

Our final sample included a total of 33 schools deemed "high needs" based the poverty rate of students in schools within those communities as measured by the percentage of students that are eligible for participation in the government-funded Free and Reduced-Priced Lunch (FRPL) program and/or on the relative wealth of the communities in which students lived as measured by the New York State Education Department Combined Wealth Ratio (CWR). Selected from the total population of 460 high-needs districts in the state, the 33 schools represent a cross-section of communities and school levels as shown in the following table.

	Elementary School	Middle School	Elementary School	Total
NYC	4	5	5	12*
Rochester	1	1	1	3
Small cities (2)	2	2	2	6
Suburban towns (2)	2	2	2	6
Rural areas (2)	2	2	2	6
Total	11	12	12	33*

^{*} This total is smaller than the combined number of schools because 2 NYC schools serve 2 grade ranges (one serves both elementary and middle schools students and one serves both middle and high school students).

The 12 NYC schools represent all 5 boroughs, and the other 21 are in 7 districts spread geographically throughout the rest of New York State. Seven of the NYC schools had with student populations of fewer than 500, and they included elementary, middle, and high schools. In each of the other districts, we chose one elementary, one middle, and one high school. As shown in the following table, the selected schools tend to be toward the higher end of the needs spectrum.

	All Districts (n=672)				High-Needs Districts (n=460)			Selected High-Needs Schools (n=33)				
	Min.	Avg.	Median	Max.	Min.	Avg.	Median	Max.	Min.	Avg.	Median	Max.
CWR	0.165	1.247	0.688	43.33	0.165	0.79	0.543	25.775	0.284	0.692	0.568	1.038
FRPL rate	0.00	0.334	0.348	1.00	0.10	0.44	0.424	1.00	0.40	0.73	0.76	0.98

The percentage of English language learners ranged from 0 in a small rural district to 42% in a school in New York City, with a sample-wide average of 12.9%. The percentage of students with disabilities ranged from 8% to 32%, with a sample-wide average of 16.5%.²⁴

²⁴ The FRPL rate for the selected high-needs schools relies on data from the 2010-2011 New York School Report Cards. The CWR data comes from the New York districts-based school aid reports for 2011-12 aid. The FRPL data for the "all high-needs districts" and "all districts" sample represents the 3-year average from the report for 2011-12 aid and reflects district-wide numbers (rather than individual schools).

In the sample schools for which data were available²⁵ student proficiency levels ranged from 47% to 92% below grade level in English language arts, with an overall average of 67% below level, and in mathematics, the range was from 34% to 90% below grade level, with an overall average of 55% not meeting state proficiency standards.

Data Collection

Our research team met multiple times with school personnel to conduct interviews based on resource inventories covering personnel, curricula, class size/instructional groupings, instructional materials, safe and supportive climate, special needs, family engagement, and facilities. Our research team consisted of 3 staff members based in our New York City office and 2 researchers based in Rochester and the Southern Tier. At least 2 researchers participated in each set of school visits and one of our core New York City staff personnel accompanied the upstate researchers to each school in order to provide consistency in all of the interviews. All participants were school personnel; we did not interview students or parents. The total time participating in the study of any individual varied from school to school depending on scheduling and the number of personnel taking part in the study. The total time we spent in interviewing each participant ranged from 1-2 hours (an individual who participated in one interview) to 9-12 hours (a principal who elected to participate in all of the inventories). In order to minimize the burden on school staff, the interviews took place over a number of days or weeks, depending on the location, and were scheduled at the convenience of school. The total amount of data collection time per school ranged from 9-12 hours. The research took place in school offices, empty classrooms, and other locations on school grounds that did not interfere with teaching and learning.

The inventories were designed to elicit evidence about respondents' views on whether the school's resources in particular categories were sufficient to comply with minimum state statutes and regulations and applicable court rulings and enable students to meet New York State Learning Standards and progress to graduation. In certain areas, we asked participants for their professional judgments about the availability of services, defined in terms of sufficient or adequate levels relative to the needs of their students. In order to do so, before each interview, the research team worked with the participants to develop a shared definition of terms like "sufficiency" and "adequacy" in the inventory questions as relating to what the participants' own student population required to be on track to meet standards and progress toward graduation, instead of in terms of ideal levels or minimal levels.

Limits of the Study

While our sample of 33 schools does not constitute a random sample of all schools or of all high-needs schools in New York State, it does represent the range of schools serving high-needs students in the state. We believe that the careful methods we used to select the 33 high-needs schools we visited, the breadth and depth of the information collected, and the consistency of findings in most areas across the full range of schools reveal significant patterns of the consequences of resource constraints for high-needs New York State schools.

While caution should be exercised with respect to generalizing particular results to the broader population of high-need schools, the study clearly demonstrates that schools throughout the state suffer from insufficient resources. We hope that this study will lead the state education department and other researchers to undertake their own systematic analyses of the availability and sufficiency of the essential resources covered in this report.

²⁸ Proficiency data for incoming high school students outside of NYC is not systematically calculated by the New York State Education Department.

